

Project Name: Riverside Housing Element Update Scenario: Existing
Analyst: Ryan Richards Job #: 158820

Roadway: Alessandro Blvd

Heavy Trucks:

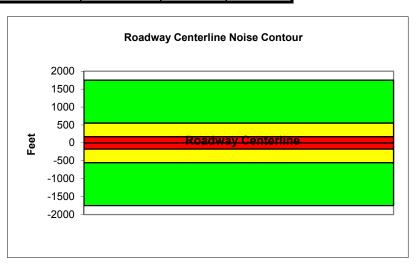
Road Segment: East of Mission Grove Pkwy

PROJEC	T DATA			S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	43370		
Receiver Barrier Dist:	0		Peak Hour Tr	affic:	4337		
Centerline Dist. To Observer:	100		Vehicle Spee	d:	50		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	65		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	is HARD S i	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grad	e): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE E	LEVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	60.2	69.0	67.2	61.1	69.8	70.4			
Medium Trucks:	67.9	59.8	53.5	51.9	60.4	60.6			
Heavy Trucks:	72.1	60.2	51.1	52.4	61.8	61.9			
Vehicle Noise:	74.4	70.1	67.5	62.2	70.8	71.3			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	1749						
65 dBA	553						
70 dBA	175						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

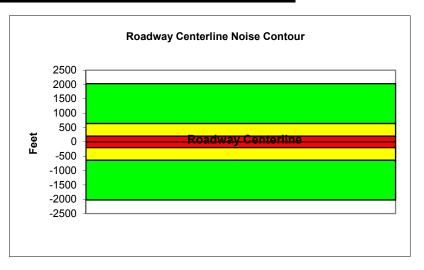


	Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)									
Project Name:	Riverside Housing Elei	ment Update	-	Scenario:	Existing					
Analyst:	Ryan Richards			Job #:	158820					
Roadway:	Alessandro Blvd									
Road Segment:	North of Via Vista									
	PROJECT DATA			S	ITE DATA					
Centerline Dist to Ba	arrier 0		Road Grade:		0					
Barrier (0=wall, 1= b	perm):		Average Dail	y Traffic:	50200					
Receiver Barrier Dis	st: C)	Peak Hour Tr	raffic:	5020					
Centerline Dist. To	Observer: 100)	Vehicle Spee	ed:	50					
Barrier Near Lane C	CL Dist: 0		Centerline Se	eparation:	50					
Barrier Far lane CL	Dist: 0)		NO	ISE INPUT	S				
Pad Elevation:	0.5	5	Site condition	ns HARD S	ITE					
Road Elevation:	C)		F	LEET MIX					
Observer Height (ab	oove grade): 0)	Туре	Day	Evening	Night	Daily			
Barrier Height:	0)	Auto	0.775	0.129	0.096	0.9742			
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184			
NOISE SC	OURCE ELEVATIONS	(Feet)	Heavy Truck	0.865	0.027	0.108	0.0074			
Autos:	0				-					
Medium Trucks:	2.3	3								
Heavy Trucks:	8	3								

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	61.1	69.9	68.1	62.0	70.6	71.2				
Medium Trucks:	68.7	60.7	54.3	52.7	61.2	61.4				
Heavy Trucks:	73.0	61.0	52.0	53.2	62.6	62.7				
Vehicle Noise:	75.3	70.9	68.4	63.1	71.7	72.2				

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	2028						
65 dBA	641						
70 dBA	203						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Existing Analyst: Ryan Richards Job #: 158820 Alessandro Blvd Roadway: Road Segment: West of Sycamore Canyon PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 43400 Peak Hour Traffic: 4340 Receiver Barrier Dist: 0 Centerline Dist. To Observer: Vehicle Speed: 100 55 Barrier Near Lane CL Dist: Centerline Separation: 0 60 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Night Daily Type Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 **NOISE SOURCE ELEVATIONS (Feet)** Heavy Truck 0.865 0.027 0.108 0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	61.5	70.3	68.5	62.4	71.1	71.7			
Medium Trucks:	68.6	60.6	54.2	52.6	61.1	61.3			
Heavy Trucks:	72.6	60.6	51.6	52.8	62.1	62.2			
Vehicle Noise:	74.9	71.2	68.7	63.3	71.9	72.5			

0

8

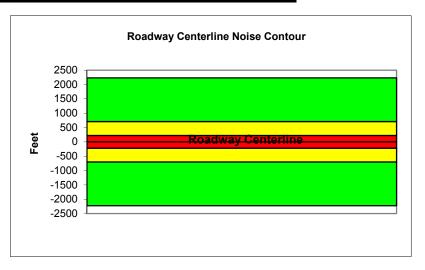
2.3

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	2229						
65 dBA	705						
70 dBA	223						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

Autos:

Medium Trucks:

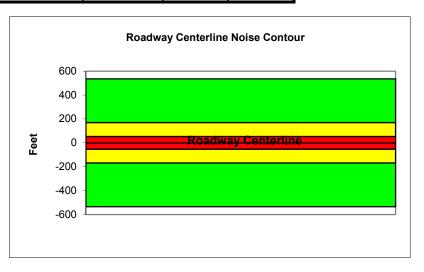


Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)										
Project Name:	Riverside Housing E		•	Scenario:	Existing					
Analyst:	Ryan Richards	·		Job #:	158820					
Roadway:	Arlington Avenue									
Road Segment:	East of Brockton Ave	е								
	PROJECT DATA			S	ITE DATA					
Centerline Dist to B	arrier	0	Road Grade:		0					
Barrier (0=wall, 1= l	berm):	0	Average Dail	y Traffic:	22800					
Receiver Barrier Dis	st:	0	Peak Hour Tr	raffic:	2280					
Centerline Dist. To	Observer: 1	00	Vehicle Speed: 40							
Barrier Near Lane (CL Dist:	0	Centerline Se	eparation:	32					
Barrier Far lane CL	Dist:	0		NO	ISE INPUT	S				
Pad Elevation:		0.5	Site condition	ns HARD S	ΙΤΕ					
Road Elevation:		0		F	LEET MIX					
Observer Height (al	bove grade):	0	Туре	Day	Evening	Night	Daily			
Barrier Height:		0	Auto	0.775	0.129	0.096	0.9742			
Rt View: 90	Lft View	: -90	Med. Truck	0.848	0.049	0.103	0.0184			
NOISE SC	OURCE ELEVATION	S (Feet)	Heavy Truck	0.865	0.027	0.108	0.0074			
Autos:		0								
Medium Trucks:		2.3								
Heavy Trucks:		8								

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	55.1	63.9	62.1	56.0	64.7	65.3			
Medium Trucks:	64.1	56.0	49.6	48.1	56.5	56.8			
Heavy Trucks:	68.9	57.0	47.9	49.2	58.9				
Vehicle Noise:	71.3	65.5	62.6	57.6	66.2	66.7			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOIS	SE CONTOUR
Unmitigated	
60 dBA	535
65 dBA	169
70 dBA	53
Mitigated	
60 dBA	
65 dBA	
70 dBA	

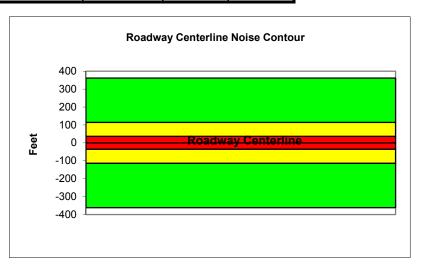


		deral Highway Ad affic Noise Predic						
Project Name:	Riverside Housing	Element Update	•	Scenario:	Existing			
Analyst:	Ryan Richards			Job #:	158820			
Roadway:	California Ave.							
Road Segment:	East of Adams St.							
	PROJECT DATA			S	ITE DATA			
Centerline Dist to E	Barrier	0	Road Grade:		0			
Barrier (0=wall, 1=	berm):	0	Average Dail	y Traffic:	15400			
Receiver Barrier Di	st:	0	Peak Hour T	raffic:	1540			
Centerline Dist. To	Observer:	100	Vehicle Spee	Vehicle Speed: 40				
Barrier Near Lane	CL Dist:	0	Centerline Se	eparation:	36			
Barrier Far lane CL	. Dist:	0		NO	NOISE INPUTS			
Pad Elevation:		0.5	Site condition	ns HARD S	ITE			
Road Elevation:		0		F	LEET MIX			
Observer Height (a	bove grade):	0	Туре	Day	Evening	Night	Daily	
Barrier Height:		0	Auto	0.775	0.129	0.096	0.9742	
Rt View: 90	Lft Vie	ew: -9	0 Med. Truck	0.848	0.049	0.103	0.0184	
NOISE S	OURCE ELEVATION	ONS (Feet)	Heavy Truck	0.865	0.027	0.108	0.0074	
Autos:		0						
Medium Trucks:		2.3						
Heavy Trucks:		8						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	53.4	62.1	60.4	54.3	62.9	63.5			
Medium Trucks:	62.3	54.2	47.9	46.3	54.8	55.0			
Heavy Trucks:	67.2	55.2	46.2	47.4	57.1	57.2			
Vehicle Noise:	69.5	63.7	60.8	55.8	64.4	64.9			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOIS	SE CONTOUR
Unmitigated	
60 dBA	361
65 dBA	114
70 dBA	36
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Existing Analyst: Ryan Richards Job #: 158820 Roadway: California Ave. Road Segment: East of Van Buren Blvd. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 14800 Peak Hour Traffic: Receiver Barrier Dist: 0 1480 Centerline Dist. To Observer: Vehicle Speed: 100 40 Barrier Near Lane CL Dist: Centerline Separation: 0 36 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184

Heavy Truck

0.865

0.027

0.108

0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	53.2	62.0	60.2	54.1	62.7	63.4			
Medium Trucks:	62.1	54.1	47.7	46.1	54.6	54.8			
Heavy Trucks:	67.0	55.1	46.0	47.2	56.9	57.1			
Vehicle Noise:	69.4	63.5	60.6	55.7	64.3	64.7			

0

8

2.3

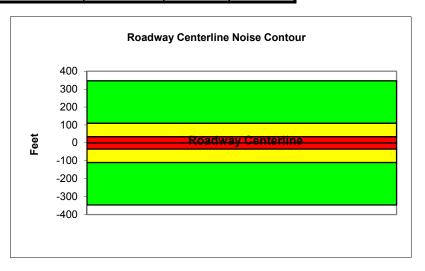
MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	347						
65 dBA	110						
70 dBA	35						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

NOISE SOURCE ELEVATIONS (Feet)

Autos:

Medium Trucks:

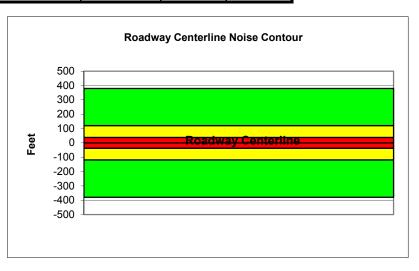


	Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)								
Project Name:	Riverside Housing Ele	ement Update	-	Scenario:	Existing				
Analyst:	Ryan Richards			Job #:	158820				
Roadway:	Chicago Ave								
Road Segment:	North of Spruce St.								
	PROJECT DATA			S	ITE DATA				
Centerline Dist to Ba	arrier	0	Road Grade:		0				
Barrier (0=wall, 1= b	perm):	0	Average Dail	y Traffic:	12200				
Receiver Barrier Dis	st:	0	Peak Hour Tr	affic:	1220				
Centerline Dist. To	Observer: 10	0	Vehicle Speed: 45						
Barrier Near Lane C	CL Dist:	0	Centerline Se	eparation:	42				
Barrier Far lane CL	Dist:	0	NOISE INPUTS						
Pad Elevation:	0.	5	Site condition	is HARD S	ITE				
Road Elevation:		0		F	LEET MIX				
Observer Height (ab	oove grade):	0	Туре	Day	Evening	Night	Daily		
Barrier Height:	(0	Auto	0.775	0.129	0.096	0.9742		
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184		
NOISE SC	OURCE ELEVATIONS	(Feet)	Heavy Truck	0.865	0.027	0.108	0.0074		
Autos:		0							
Medium Trucks:	2.:	3							
Heavy Trucks:	;	8							

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	53.7	62.5	60.7	54.6	63.3	63.9			
Medium Trucks:	62.0	53.9	47.6	46.0	54.5	54.7			
Heavy Trucks:	66.5	54.6	45.5	46.8	56.3	56.4			
Vehicle Noise:	68.9	63.8	61.1	55.9	64.5	65.0			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOIS	SE CONTOUR
Unmitigated	
60 dBA	379
65 dBA	120
70 dBA	38
Mitigated	
60 dBA	
65 dBA	
70 dBA	

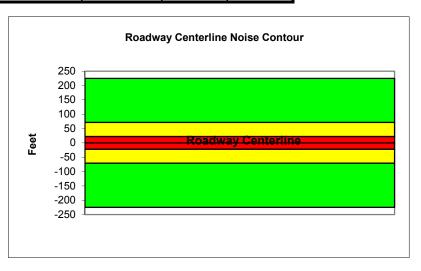


		Highway Adm Ioise Prediction					
Project Name:	Riverside Housing Elem	ent Update	·	Scenario:	Existing		
Analyst:	Ryan Richards			Job #:	158820		
Roadway:	ndiana Ave.						
Road Segment:	East of Harrison St.						
	PROJECT DATA			S	ITE DATA		
Centerline Dist to Ba	rrier 0		Road Grade:		0		
Barrier (0=wall, 1= b	erm): 0		Average Dail	y Traffic:	9600		
Receiver Barrier Dis	t: 0		Peak Hour Tr	affic:	960		
Centerline Dist. To C	Observer: 100		Vehicle Spee	d:	40		
Barrier Near Lane C	L Dist: 0		Centerline Se	eparation:	36		
Barrier Far lane CL I	Dist: 0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	is HARD S I	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (ab	ove grade): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SO	URCE ELEVATIONS (F	eet)	Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						
Heavy Trucks:	8						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	51.3	60.1	58.3	52.2	60.9	61.5			
Medium Trucks:	60.3	52.2	45.8	44.2	52.7	53.0			
Heavy Trucks:	65.1	53.2	44.1	45.3	55.0	55.2			
Vehicle Noise:	67.5	61.7	58.7	53.8	62.4	62.9			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOIS	SE CONTOUR
Unmitigated	
60 dBA	225
65 dBA	71
70 dBA	22
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO) Project Name: Riverside Housing Element Update Scenario: Existing Ryan Richards Analyst: Job #:

Roadway: Jackson St.

Road Segment: North of Indiana Ave.

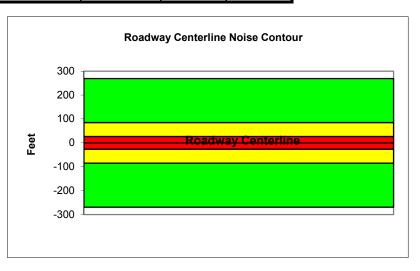
PROJECT D	ATA		SITE DATA				
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	11500		
Receiver Barrier Dist:	0		Peak Hour Traffic: 1150				
Centerline Dist. To Observer:	100		Vehicle Speed: 40				
Barrier Near Lane CL Dist:	0		Centerline Separation: 42				
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	is HARD S	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade):	0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90 L	ft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE ELEV	ATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						

Medium Trucks:	2.3	
Heavy Trucks:	8	

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	52.0	60.8	59.0	52.9	61.6	62.2			
Medium Trucks:	61.0	52.9	46.5	44.9	53.4	53.7			
Heavy Trucks:	65.8	53.9	44.8	46.0	55.7	55.9			
Vehicle Noise:	68.2	62.4	59.4	54.5	63.1	63.5			

MITIGAT	ED NOISE L	.EVELS (W	ith topographi	c or barrier a	ttenuation)
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	269					
65 dBA	85					
70 dBA	27					
Mitigated						
60 dBA						
65 dBA						
70 dBA						



Project Name: Riverside Housing Element Update Scenario: Existing
Analyst: Ryan Richards Job #: 158820

Roadway: La Sierra Ave.

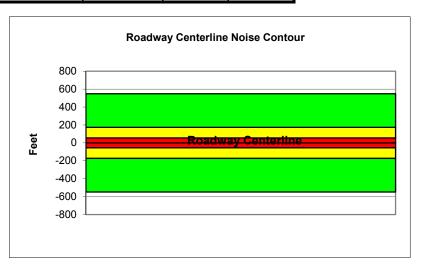
Road Segment: Magnolia Ave. to Collett Ave.

PROJEC	T DATA			S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Daily	y Traffic:	23400		
Receiver Barrier Dist:	0		Peak Hour Tr	affic:	2340		
Centerline Dist. To Observer:	100		Vehicle Spee	d:	40		
Barrier Near Lane CL Dist: 0			Centerline Se	Centerline Separation: 50			
Barrier Far lane CL Dist:	0		NOISE INPUTS				
Pad Elevation:	0.5		Site condition	is HARD S I	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade	e): 0		Туре	Day	Evening	Night	Daily
- CDOO! FO! I loight (above grade	- / -						
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
3 \	0 Lft View:		Auto Med. Truck	0.775 0.848		0.096 0.103	
Barrier Height:	0 Lft View:	-90			0.049		0.0184
Barrier Height: Rt View: 90	0 Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
Barrier Height: Rt View: 90 NOISE SOURCE EL	0 Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	55.0	63.7	62.0	55.9	64.5	65.1				
Medium Trucks:	63.9	55.9	49.5	47.9	56.4	56.6				
Heavy Trucks:	68.8	56.8	47.8	49.0	58.7	58.8				
Vehicle Noise:	71.1	65.3	62.4	57.5	66.0	66.5				

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	548						
65 dBA	173						
70 dBA	55						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



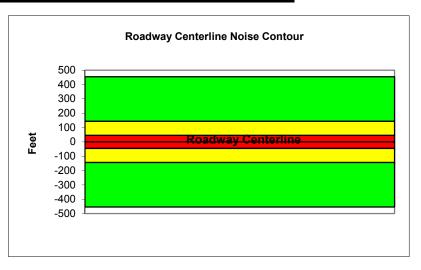
Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Existing Analyst: Ryan Richards Job #: 158820 La Sierra Ave. Roadway: Road Segment: North of Cypress Ave. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 14600 Peak Hour Traffic: Receiver Barrier Dist: 0 1460 Centerline Dist. To Observer: Vehicle Speed: 45 100 Barrier Near Lane CL Dist: Centerline Separation: 0 50 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 **NOISE SOURCE ELEVATIONS (Feet)** Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0 Medium Trucks: 2.3

UNMITIG	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL					
Autos:	54.4	63.2	61.4	55.3	63.9	64.6					
Medium Trucks:	62.7	54.6	48.2	46.6	55.1	55.4					
Heavy Trucks:	67.2	55.3	46.2	47.4	57.0	57.1					
Vehicle Noise:	69.5	64.5	61.7	56.6	65.2	65.7					

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR								
Unmitigated								
60 dBA	454							
65 dBA	144							
70 dBA	45							
Mitigated								
60 dBA								
65 dBA								
70 dBA								

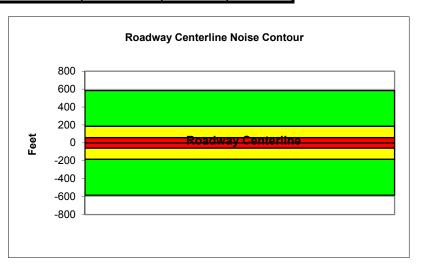


	Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)										
Project Name:	Riverside Housing I	Element Update	•	Scenario:	Existing						
Analyst:	Ryan Richards			Job #:	158820						
Roadway:	La Sierra Ave.										
Road Segment:	North of Pierce St.										
	PROJECT DATA			S	ITE DATA						
Centerline Dist to B	arrier	0	Road Grade:		0						
Barrier (0=wall, 1=	berm):	0	Average Dail	y Traffic:	24900						
Receiver Barrier Dis	st:	0	Peak Hour Tr	raffic:	2490						
Centerline Dist. To	Observer:	100	Vehicle Speed: 40								
Barrier Near Lane (CL Dist:	0	Centerline Se	eparation:	50						
Barrier Far lane CL	Dist:	0	NOISE INPUTS								
Pad Elevation:		0.5	Site condition	is HARD S	ITE						
Road Elevation:		0		F	LEET MIX						
Observer Height (al	bove grade):	0	Туре	Day	Evening	Night	Daily				
Barrier Height:		0	Auto	0.775	0.129	0.096	0.9742				
Rt View: 90	Lft View	/: -90	Med. Truck	0.848	0.049	0.103	0.0184				
NOISE SO	OURCE ELEVATION	NS (Feet)	Heavy Truck	0.865	0.027	0.108	0.0074				
Autos:		0									
Medium Trucks:		2.3									
Heavy Trucks:		8									

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)											
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL					
Autos:	55.2	64.0	62.2	56.1	64.8	65.4					
Medium Trucks:	64.2	56.1	49.7	48.2	56.7	56.9					
Heavy Trucks:	69.0	57.1	48.0	49.3	59.0	59.1					
Vehicle Noise:	71.4	65.6	62.7	57.7	66.3	66.8					

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR								
Unmitigated								
60 dBA	584							
65 dBA	185							
70 dBA	58							
Mitigated								
60 dBA								
65 dBA								
70 dBA								

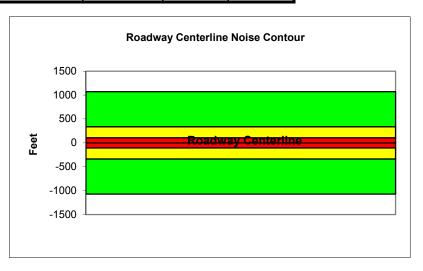


		Federal High Traffic Noise						
Project Name:	Riverside Ho	ousing Element L		•	Scenario:	Existing		
Analyst:	Ryan Richar	ds			Job #:	158820		
Roadway:	La Sierra Av	e.						
Road Segment:	North of SR-	91						
	PROJECT [DATA			S	ITE DATA		
Centerline Dist to E	Barrier	0		Road Grade:		0		
Barrier (0=wall, 1=	berm):	0		Average Dail	y Traffic:	34500		
Receiver Barrier D	ist:	0		Peak Hour Tr	raffic:	3450		
Centerline Dist. To	Observer:	100		Vehicle Speed: 45				
Barrier Near Lane	CL Dist:	0		Centerline Se	eparation:	50		
Barrier Far lane CL	_ Dist:	0		NOISE INPUTS				
Pad Elevation:		0.5		Site condition	ns HARD S	TE		
Road Elevation:		0			F	LEET MIX		
Observer Height (a	above grade):	0		Туре	Day	Evening	Night	Daily
Barrier Height:		0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90)	_ft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE S	OURCE ELEV	/ATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:		0				-		
Medium Trucks:		2.3						
Heavy Trucks:		8						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)											
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL					
Autos:	58.1	66.9	65.1	59.0	67.7	68.3					
Medium Trucks:	66.4	58.3	52.0	50.4	58.9	59.1					
Heavy Trucks:	70.9	59.0	49.9	51.1	60.7	60.8					
Vehicle Noise:	73.3	68.2	65.5	60.3	68.9	69.4					

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR								
Unmitigated								
60 dBA	1072							
65 dBA	339							
70 dBA	107							
Mitigated								
60 dBA								
65 dBA								
70 dBA								

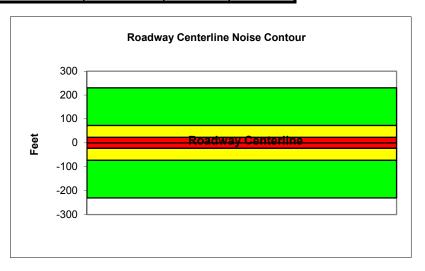


	Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)									
Project Name:	· · · · · · · · · · · · · · · · · · ·									
Analyst:	Ryan Richards	,			Job #:	158820				
•	Lincoln Ave									
•	West of Monroe S	st.								
	PROJECT DATA				S	ITE DATA				
Centerline Dist to E	arrier	0		Road Grade:		0				
Barrier (0=wall, 1=	berm):	0		Average Dail	y Traffic:	7400				
Receiver Barrier Di	st:	0		Peak Hour Tr	raffic:	740				
Centerline Dist. To	Observer:	100		Vehicle Speed: 45						
Barrier Near Lane (CL Dist:	0		Centerline Se	eparation:	36				
Barrier Far lane CL	Dist:	0			NO	ISE INPUT	S			
Pad Elevation:		0.5		Site condition	ns HARD S	ITE				
Road Elevation:		0			F	LEET MIX				
Observer Height (a	bove grade):	0		Туре	Day	Evening	Night	Daily		
Barrier Height:		0		Auto	0.775			0.9742		
Rt View: 90	Lft Vie	ew:	-90	Med. Truck	0.848	0.049	0.103	0.0184		
NOISE S	OURCE ELEVATION	ONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074		
Autos:		0								
Medium Trucks:		2.3								
Heavy Trucks:		8								

UNMITIGA	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL					
Autos:	51.7	60.4	58.6	52.6	61.2	61.8					
Medium Trucks:	59.9	51.9	45.5	43.9	52.4	52.6					
Heavy Trucks:	64.4	52.5	43.5	44.7	54.2						
Vehicle Noise:	66.8	61.7	59.0	53.9	62.5	63.0					

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR								
Unmitigated								
60 dBA	230							
65 dBA	73							
70 dBA	23							
Mitigated								
60 dBA								
65 dBA								
70 dBA								

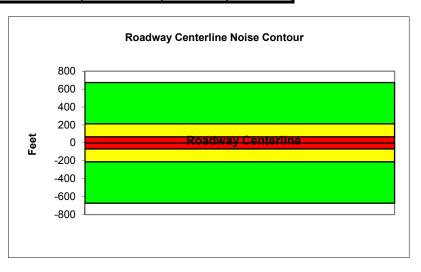


	Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)									
Project Name:	Riverside Housing Ele	ment Update	-	Scenario:	Existing					
Analyst:	Ryan Richards			Job #:	158820					
Roadway:	Magnolia Ave.									
Road Segment:	East of Harrison St.									
	PROJECT DATA			S	ITE DATA					
Centerline Dist to Ba	arrier	0	Road Grade:		0					
Barrier (0=wall, 1= b	perm):	0	Average Dail	y Traffic:	28700					
Receiver Barrier Dis	st:	0	Peak Hour Ti	Peak Hour Traffic: 2870						
Centerline Dist. To	Observer: 10	0	Vehicle Speed: 40							
Barrier Near Lane C	CL Dist:	0	Centerline Se	eparation:	50					
Barrier Far lane CL	Dist:	0		NO	ISE INPUT	S				
Pad Elevation:	0.	5	Site condition	ns HARD S	ITE					
Road Elevation:		0		F	LEET MIX					
Observer Height (at	oove grade):	0	Туре	Day	Evening	Night	Daily			
Barrier Height:	(0	Auto	0.775	0.129	0.096	0.9742			
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184			
NOISE SO	OURCE ELEVATIONS	(Feet)	Heavy Truck	0.865	0.027	0.108	0.0074			
Autos:		0								
Medium Trucks:	2.:	3								
Heavy Trucks:	;	8								

UNMITIG	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL					
Autos:	55.9	64.6	62.8	56.8	65.4	66.0					
Medium Trucks:	64.8	56.7	50.4	48.8	57.3	57.5					
Heavy Trucks:	69.7	57.7	48.7	49.9	59.6	59.7					
Vehicle Noise:	72.0	66.2	63.3	58.3	66.9	67.4					

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR								
Unmitigated								
60 dBA	673							
65 dBA	213							
70 dBA	67							
Mitigated								
60 dBA								
65 dBA								
70 dBA								

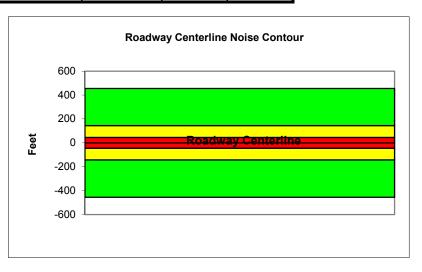


	Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)									
Project Name:	Riverside Housing	g Element Update	•	Scenario:	Existing					
Analyst:	Ryan Richards	,		Job #:	158820					
Roadway:	Magnolia Ave.									
Road Segment:	East of Jackson S	St.								
	PROJECT DATA	L		S	ITE DATA					
Centerline Dist to E	Barrier	0	Road Grade:		0					
Barrier (0=wall, 1=	berm):	0	Average Dail	y Traffic:	19400					
Receiver Barrier Di	st:	0	Peak Hour T	raffic:	1940					
Centerline Dist. To	Observer:	100	Vehicle Spee	Vehicle Speed: 40						
Barrier Near Lane (CL Dist:	0	Centerline Se	eparation:	50					
Barrier Far lane CL	Dist:	0		NO	ISE INPUT	S				
Pad Elevation:		0.5	Site condition	ns HARD S	ITE					
Road Elevation:		0		F	LEET MIX					
Observer Height (a	bove grade):	0	Туре	Day	Evening	Night	Daily			
Barrier Height:		0	Auto	0.775	0.129	0.096	0.9742			
Rt View: 90	Lft Vi	ew: -9	Med. Truck	0.848	0.049	0.103	0.0184			
NOISE S	OURCE ELEVATION	ONS (Feet)	Heavy Truck	0.865	0.027	0.108	0.0074			
Autos:		0								
Medium Trucks:		2.3								
Heavy Trucks:		8								

UNMITIG	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL					
Autos:	54.2	62.9	61.1	55.1	63.7	64.3					
Medium Trucks:	63.1	55.0	48.7	47.1	55.6	55.8					
Heavy Trucks:	68.0	56.0	47.0	48.2	57.9	58.0					
Vehicle Noise:	70.3	64.5	61.6	56.6	65.2	65.7					

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	455						
65 dBA	144						
70 dBA	46						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

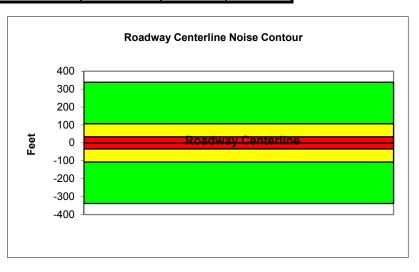


Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)											
Project Name:	Riverside Housir	Housing Element Update Scenario: Existing									
Analyst:	Ryan Richards				Job #:	158820					
Roadway:	Magnolia Ave.										
Road Segment:	South of Jurupa	Ave.									
	PROJECT DAT	Α			S	ITE DATA					
Centerline Dist to B	arrier	0		Road Grade:		0					
Barrier (0=wall, 1=	berm):	0		Average Dail	y Traffic:	19600					
Receiver Barrier Di	st:	0		Peak Hour Tr	affic:	1960					
Centerline Dist. To	Observer:	100		Vehicle Speed: 35							
Barrier Near Lane (CL Dist:	0		Centerline Se	eparation:	36					
Barrier Far lane CL	Dist:	0			NO	ISE INPUT	S				
Pad Elevation:		0.5		Site condition	is HARD S I	TE					
Road Elevation:		0			F	LEET MIX					
Observer Height (a	bove grade):	0		Туре	Day	Evening	Night	Daily			
Barrier Height:		0		Auto	0.775	0.129	0.096	0.9742			
Rt View: 90	Lft V	'iew:	-90	Med. Truck	0.848	0.049	0.103	0.0184			
NOISE SO	OURCE ELEVAT	IONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074			
Autos:		0									
Medium Trucks:		2.3									
Heavy Trucks:		8									

UNMITIGA	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)											
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL						
Autos:	52.7	61.5	59.7	53.6	62.3	62.9						
Medium Trucks:	62.5	54.4	48.0	46.4	54.9	55.2						
Heavy Trucks:	67.7	55.7	46.7	47.9	57.8	57.9						
Vehicle Noise:	70.1	63.5	60.3	55.6	64.2	64.6						

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)											
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL					
Autos:											
Medium Trucks:											
Heavy Trucks:											
Vehicle Noise:											

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	338						
65 dBA	107						
70 dBA	34						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



Project Name: Riverside Housing Element Update Scenario: Existing
Analyst: Ryan Richards Job #: 158820

Roadway: Magnolia Ave.

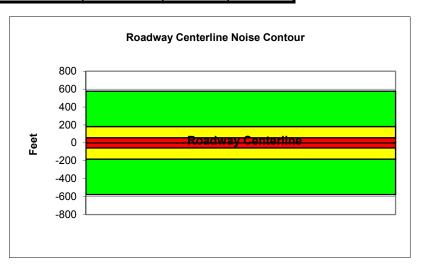
Road Segment: SR-91 WB Off-Ramp to SR-91 WB On-Ramp

PROJECT		S	ITE DATA				
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	24600		
Receiver Barrier Dist:	0		Peak Hour Tr	raffic:	2460		
Centerline Dist. To Observer:	100		Vehicle Spee	ed:	40		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	80		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	is HARD S	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade):	0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE ELE	VATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						
Heavy Trucks:	8						

UNMITIG	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)											
Vehicle Type Peak Leq Leq Day Leq Evening Leq Night Ldn												
Autos:	54.8	63.6	61.8	55.7	64.3	65.0						
Medium Trucks:	63.7	55.7	49.3	47.7	56.2	56.4						
Heavy Trucks:	68.6	56.6	47.6	48.8	58.5	58.7						
Vehicle Noise:	71.0	65.1	62.2	57.3	65.9	66.3						

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	576						
65 dBA	182						
70 dBA	58						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

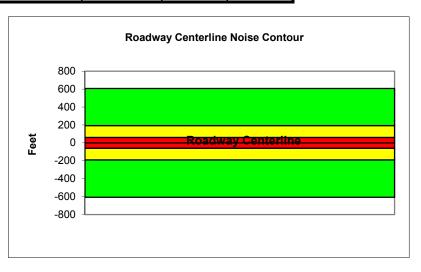


		Federal High Traffic Noise						
Project Name:	Riverside Ho	ousing Element U		•	Scenario:	Existing		
Analyst:	Ryan Richar	ds	•		Job #:	158820		
Roadway:	Magnolia Av	e.						
Road Segment:								
_	PROJECT I	DATA			S	ITE DATA		
Centerline Dist to E	3arrier	0		Road Grade:		0		
Barrier (0=wall, 1=	berm):	0		Average Dail	y Traffic:	25900		
Receiver Barrier D	ist:	0		Peak Hour Tr	affic:	2590		
Centerline Dist. To	Observer:	100		Vehicle Speed: 40				
Barrier Near Lane	CL Dist:	0		Centerline Se	eparation:	50		
Barrier Far lane Cl	_ Dist:	0			NO	ISE INPUT	S	
Pad Elevation:		0.5		Site condition	ns HARD S	TE		
Road Elevation:		0			F	LEET MIX		
Observer Height (a	above grade):	0		Туре	Day	Evening	Night	Daily
Barrier Height:	- ,	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90)	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE S	OURCE ELE	VATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:		0				-		-
Medium Trucks:		2.3						
Heavy Trucks:		8						

UNMITIG	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)											
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL						
Autos:	55.4	64.2	62.4	56.3	65.0	65.6						
Medium Trucks:	64.4	56.3	49.9	48.3	56.8	57.1						
Heavy Trucks:	69.2	57.3	48.2	49.4	59.1	59.3						
Vehicle Noise:	71.6	65.8	62.8	57.9	66.5	67.0						

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:							
Medium Trucks:							
Heavy Trucks:							
Vehicle Noise:							

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	607					
65 dBA	192					
70 dBA	61					
Mitigated						
60 dBA						
65 dBA						
70 dBA						



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Existing Analyst: Ryan Richards Job #: 158820 Martin Luther King Blvd. Roadway: East of Iowa Ave. Road Segment: PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 23300 Peak Hour Traffic: Receiver Barrier Dist: 0 2330 Centerline Dist. To Observer: Vehicle Speed: 100 35 Barrier Near Lane CL Dist: Centerline Separation: 0 46 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Night Daily Type Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 NOISE SOURCE ELEVATIONS (Feet) Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	53.3	62.1	60.3	54.2	62.9	63.5	
Medium Trucks:	63.1	55.0	48.6	47.0	55.5	55.8	
Heavy Trucks:	68.3	56.3	47.3	48.5	58.4	58.5	
Vehicle Noise:	70.7	64.1	60.9	56.2	64.8	65.2	

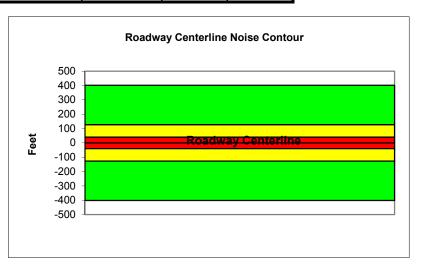
2.3

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:							
Medium Trucks:							
Heavy Trucks:							
Vehicle Noise:							

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	402					
65 dBA	127					
70 dBA	40					
Mitigated						
60 dBA						
65 dBA						
70 dBA						

Medium Trucks:



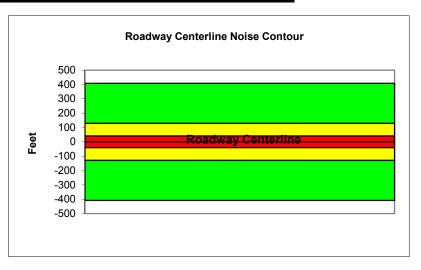
Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Existing Analyst: Ryan Richards Job #: 158820 Martin Luther King Blvd. Roadway: Road Segment: East of Kansas Ave. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 23700 Peak Hour Traffic: Receiver Barrier Dist: 0 2370 Centerline Dist. To Observer: Vehicle Speed: 100 35 Barrier Near Lane CL Dist: Centerline Separation: 0 46 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 **NOISE SOURCE ELEVATIONS (Feet)** Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0 Medium Trucks: 2.3

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	53.4	62.2	60.4	54.3	63.0	63.6	
Medium Trucks:	63.1	55.1	48.7	47.1	55.6	55.8	
Heavy Trucks:	68.3	56.4	47.4	48.6	58.5	58.6	
Vehicle Noise:	70.8	64.1	61.0	56.3	64.8	65.3	

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	409					
65 dBA	129					
70 dBA	41					
Mitigated						
60 dBA						
65 dBA						
70 dBA						



Project Name: Riverside Housing Element Update Scenario: Existing Analyst: Ryan Richards Job #: 158820

Roadway: Pierce St.

Heavy Trucks:

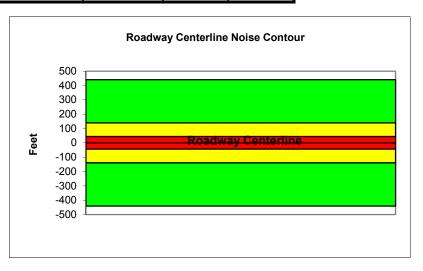
Road Segment: West of La Sierra Ave.

	PROJECT	DATA			S	ITE DATA		
Centerline Dist	to Barrier	0		Road Grade:		0		
Barrier (0=wall,	1= berm):	0		Average Dail	y Traffic:	18800		
Receiver Barrie	r Dist:	0		Peak Hour Tr	raffic:	1880		
Centerline Dist.	To Observer:	100		Vehicle Spee	ed:	40		
Barrier Near La	Barrier Near Lane CL Dist: 0			Centerline Se	eparation:	45		
Barrier Far lane	: CL Dist:	0		NOISE INPUTS				
Pad Elevation:		0.5		Site condition	is HARD S	TE		
Road Elevation	<u>.</u>	0			F	LEET MIX		
Observer Heigh	it (above grade):	0		Туре	Day	Evening	Night	Daily
Barrier Height:		0		Auto	0.775	0.129	0.096	0.9742
Rt View:	90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISI	E SOURCE ELE	VATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:		0						
Medium Trucks	:	2.3						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	54.1	62.9	61.1	55.0	63.6	64.3	
Medium Trucks:	63.0	55.0	48.6	47.0	55.5	55.7	
Heavy Trucks:	67.9	56.0	46.9	48.1	57.8	58.0	
Vehicle Noise:	70.3	64.4	61.5	56.6	65.2	65.6	

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:							
Medium Trucks:							
Heavy Trucks:							
Vehicle Noise:							

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	440					
65 dBA	139					
70 dBA	44					
Mitigated						
60 dBA						
65 dBA						
70 dBA						



Project Name: Riverside Housing Element Update Scenario: Existing
Analyst: Ryan Richards Job #: 158820

Roadway: Riverwalk Pkwy.

Heavy Trucks:

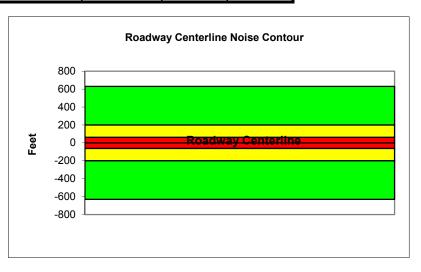
Road Segment: Sierra Vista Ave. to Raley Dr.

PROJECT	Γ DATA			S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	26900		
Receiver Barrier Dist:	0		Peak Hour Ti	raffic:	2690		
Centerline Dist. To Observer:	100		Vehicle Spee	ed:	40		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	45		
Barrier Far lane CL Dist:	0		NOISE INPUTS				
Pad Elevation:	0.5		Site condition	ns HARD S I	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade	e): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE EL	EVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						

UNMITIG	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	55.6	64.4	62.6	56.6	65.2	65.8			
Medium Trucks:	64.6	56.5	50.1	48.6	57.1	57.3			
Heavy Trucks:	69.4	57.5	48.5	49.7	59.4	59.5			
Vehicle Noise:	71.8	66.0	63.1	58.1	66.7	67.2			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:							
Medium Trucks:							
Heavy Trucks:							
Vehicle Noise:							

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	631					
65 dBA	199					
70 dBA	63					
Mitigated						
60 dBA						
65 dBA						
70 dBA						



Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO) Project Name: Riverside Housing Element Update Scenario: Existing Ryan Richards Analyst: Job #:

Roadway: Trautwein Rd.

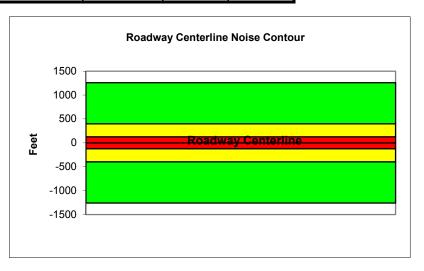
Road Segment: South of Alessandro Blvd.

PROJEC	T DATA			S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Daily	y Traffic:	31200		
Receiver Barrier Dist:	0		Peak Hour Tr	affic:	3120		
Centerline Dist. To Observer:	100		Vehicle Spee	d:	50		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	60		
Barrier Far lane CL Dist:	0		NOISE INPUTS				
Pad Elevation:	0.5		Site conditions HARD SITE				
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade	e): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE EL	_EVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						
Heavy Trucks:	8						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	58.9	67.6	65.9	59.8	68.4	69.0		
Medium Trucks:	66.5	58.5	52.1	50.5	59.0	59.2		
Heavy Trucks:	70.8	58.8	49.8	51.0	60.4	60.5		
Vehicle Noise:	73.1	68.7	66.2	60.9	69.5	70.0		

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:							
Medium Trucks:							
Heavy Trucks:							
Vehicle Noise:							

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	1259					
65 dBA	398					
70 dBA	126					
Mitigated						
60 dBA						
65 dBA						
70 dBA						



Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO) Project Name: Riverside Housing Element Update Scenario: Existing Ryan Richards Analyst: Job #:

Roadway: Tyler St.

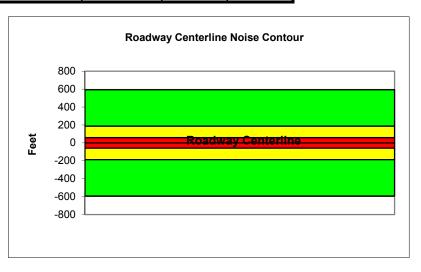
Road Segment: North of Magnolia Ave.

PROJECT DATA				S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade: 0				
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	25300		
Receiver Barrier Dist:	0		Peak Hour Tr	affic:	2530		
Centerline Dist. To Observer:	100		Vehicle Spee	d:	40		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	60		
Barrier Far lane CL Dist:	0		NOISE INPUTS				
Pad Elevation:	0.5		Site condition	is HARD S i	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE EL	EVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						
Heavy Trucks:	8						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	55.2	63.9	62.2	56.1	64.7	65.3		
Medium Trucks:	64.1	56.1	49.7	48.1	56.6	56.8		
Heavy Trucks:	69.0	57.0	48.0	49.2	58.9	59.0		
Vehicle Noise:	71.3	65.5	62.6	57.7	66.2	66.7		

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:							
Medium Trucks:							
Heavy Trucks:							
Vehicle Noise:							

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	593						
65 dBA	188						
70 dBA	59						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



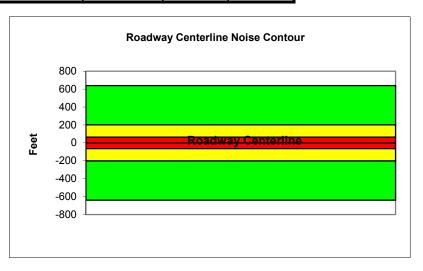
Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Existing Analyst: Ryan Richards Job #: 158820 Roadway: Tyler St. Road Segment: North of SR-91 PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 37000 Peak Hour Traffic: Receiver Barrier Dist: 0 3700 Centerline Dist. To Observer: Vehicle Speed: 100 35 Barrier Near Lane CL Dist: Centerline Separation: 0 60 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 NOISE SOURCE ELEVATIONS (Feet) Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0 Medium Trucks: 2.3

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	55.1	63.9	62.1	56.1	64.7	65.3	
Medium Trucks:	64.9	56.8	50.4	48.8	57.3	57.6	
Heavy Trucks:	70.1	58.1	49.1	50.3	60.2	60.3	
Vehicle Noise:	72.5	65.9	62.7	58.0	66.6	67.0	

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	638					
65 dBA	202					
70 dBA	64					
Mitigated						
60 dBA						
65 dBA						
70 dBA						

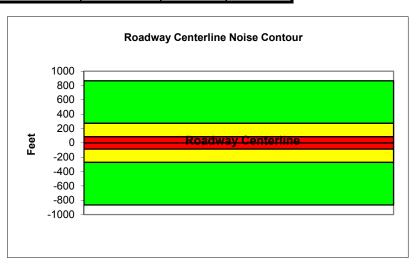


		Federal High Traffic Noise						
Project Name:	Riverside Ho	using Element U		•	Scenario:	Existing		
Analyst:	Ryan Richar	ds			Job #:	158820		
Roadway:	Van Buren B	lvd						
Road Segment:	North of SR-	91						
	PROJECT D)ATA			S	ITE DATA		
Centerline Dist to E	Barrier	0		Road Grade:		0		
Barrier (0=wall, 1=	berm):	0		Average Dail	y Traffic:	36900		
Receiver Barrier D	ist:	0		Peak Hour Tr	affic:	3690		
Centerline Dist. To	Observer:	100		Vehicle Speed: 40				
Barrier Near Lane	CL Dist:	0		Centerline Se	eparation:	60		
Barrier Far lane Cl	_ Dist:	0			NO	ISE INPUT	S	
Pad Elevation:		0.5		Site conditions HARD SITE				
Road Elevation:		0			F	LEET MIX		
Observer Height (a	above grade):	0		Туре	Day	Evening	Night	Daily
Barrier Height:		0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90) [₋ft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE S	OURCE ELEV	/ATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:		0				-		
Medium Trucks:		2.3						
Heavy Trucks:		8						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	56.8	65.6	63.8	57.7	66.4	67.0	
Medium Trucks:	65.8	57.7	51.3	49.7	58.2	58.5	
Heavy Trucks:	70.6	58.7	49.6	50.8	60.5	60.7	
Vehicle Noise:	73.0	67.2	64.2	59.3	67.9	68.4	

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	865						
65 dBA	274						
70 dBA	87						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Existing Analyst: Ryan Richards Job #: 158820 Van Buren Blvd Roadway: Road Segment: South of Cleveland Ave. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 38100 Peak Hour Traffic: Receiver Barrier Dist: 0 3810 Centerline Dist. To Observer: Vehicle Speed: 100 55 Barrier Near Lane CL Dist: Centerline Separation: 0 45 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX**

Type

Auto

Day

0.775

Evening

0.129

0.049

0.027

Night

0.096

0.103

0.108

Daily

0.9742

0.0184

0.0074

Rt View: 90 Lft View: -90 Med. Truck 0.848

NOISE SOURCE ELEVATIONS (Feet) Heavy Truck 0.865

Autos: 0

Medium Trucks: 2.3

8

0

0

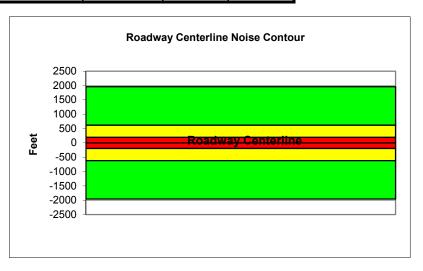
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	61.1	69.9	68.1	62.0	70.7	71.3		
Medium Trucks:	68.3	60.2	53.8	52.2	60.7	61.0		
Heavy Trucks:	72.2	60.3	51.2	52.5	61.7	61.8		
Vehicle Noise:	74.5	70.9	68.4	63.0	71.6	72.1		

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	1958					
65 dBA	619					
70 dBA	196					
Mitigated						
60 dBA						
65 dBA						
70 dBA						

Observer Height (above grade):

Barrier Height:



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Existing Analyst: Ryan Richards Job #: 158820 Roadway: Van Buren Blvd Road Segment: West of Washington St. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 32100 Peak Hour Traffic: Receiver Barrier Dist: 0 3210 Centerline Dist. To Observer: Vehicle Speed: 100 55 Barrier Near Lane CL Dist: Centerline Separation: 0 40 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 NOISE SOURCE ELEVATIONS (Feet) Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	60.5	69.3	67.5	61.4	70.0	70.6	
Medium Trucks:	67.6	59.5	53.1	51.6	60.1	60.3	
Heavy Trucks:	71.6	59.6	50.6	51.8	61.0	61.2	
Vehicle Noise:	73.9	70.2	67.7	62.3	70.9	71.4	

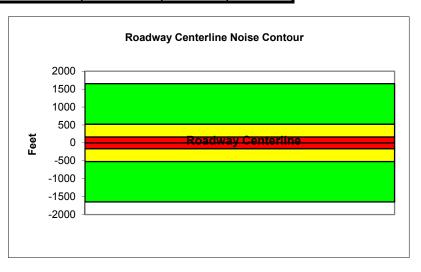
2.3

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	1649						
65 dBA	521						
70 dBA	165						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

Medium Trucks:

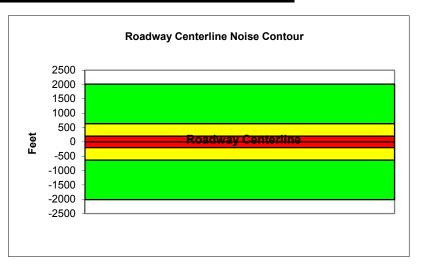


	Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)									
Project Name:	Riverside Housing Ele	ement Update	-	Scenario:	Existing					
Analyst:	Ryan Richards			Job #:	158820					
Roadway:	Van Buren Blvd									
Road Segment:	West of Wood Rd.									
	PROJECT DATA			S	ITE DATA					
Centerline Dist to B	arrier	0	Road Grade:		0					
Barrier (0=wall, 1=	berm):	0	Average Dail	y Traffic:	39200					
Receiver Barrier Dis	st:	0	Peak Hour Tr	raffic:	3920					
Centerline Dist. To	Observer: 10	0	Vehicle Speed: 55							
Barrier Near Lane (CL Dist:	0	Centerline Se	eparation:	40					
Barrier Far lane CL	Dist:	0	NOISE INPUTS							
Pad Elevation:	0	.5	Site condition	ns HARD S I	TE					
Road Elevation:		0		F	LEET MIX					
Observer Height (al	bove grade):	0	Туре	Day	Evening	Night	Daily			
Barrier Height:		0	Auto	0.775			0.9742			
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184			
NOISE SO	OURCE ELEVATIONS	(Feet)	Heavy Truck	0.865	0.027	0.108	0.0074			
Autos:		0								
Medium Trucks:	2	.3								
Heavy Trucks:		8								

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	61.3	70.1	68.3	62.2	70.9	71.5		
Medium Trucks:	68.5	60.4	54.0	52.4	60.9	61.2		
Heavy Trucks:	72.4	60.5	51.4	52.7	61.9	62.0		
Vehicle Noise:	74.7	71.1	68.6	63.2	71.8	72.3		

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	2014						
65 dBA	637						
70 dBA	201						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

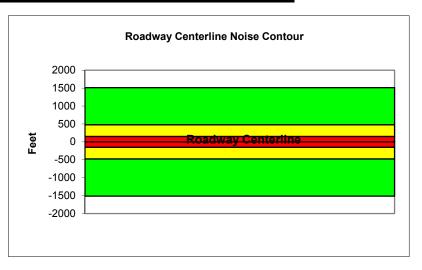


	Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)									
Project Name:	Riverside Housing E	lement Update	-	Scenario:	Existing					
Analyst:	Ryan Richards			Job #:	158820					
Roadway:	Van Buren Blvd									
Road Segment:	North of Arlington Av	ve.								
	PROJECT DATA			S	ITE DATA					
Centerline Dist to B	arrier	0	Road Grade:		0					
Barrier (0=wall, 1= b	perm):	0	Average Dail	y Traffic:	48700					
Receiver Barrier Dis	st:	0	Peak Hour Ti	raffic:	4870					
Centerline Dist. To	Observer: 1	100	Vehicle Speed: 45							
Barrier Near Lane C	CL Dist:	0	Centerline Se	eparation:	65					
Barrier Far lane CL	Dist:	0	NOISE INPUTS							
Pad Elevation:		0.5	Site condition	ns HARD S	ITE					
Road Elevation:		0		F	LEET MIX					
Observer Height (at	oove grade):	0	Туре	Day	Evening	Night	Daily			
Barrier Height:		0	Auto	0.775	0.129	0.096	0.9742			
Rt View: 90	Lft View	: -90	Med. Truck	0.848	0.049	0.103	0.0184			
NOISE SO	OURCE ELEVATION	IS (Feet)	Heavy Truck	0.865	0.027	0.108	0.0074			
Autos:		0								
Medium Trucks:	:	2.3								
Heavy Trucks:		8								

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	59.4	68.2	66.4	60.3	69.0	69.6			
Medium Trucks:	67.7	59.6	53.2	51.7	60.2	60.4			
Heavy Trucks:	72.2	60.3	51.2	52.4	62.0	62.1			
Vehicle Noise:	74.5	69.5	66.8	61.6	70.2	70.7			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	1513						
65 dBA	478						
70 dBA	151						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

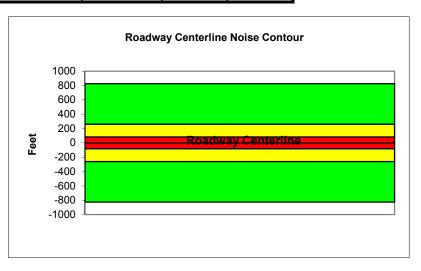


Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)									
Project Name:	Riverside Housing Ele	ment Update		Scenario:	Existing				
Analyst:	Ryan Richards			Job #:	158820				
Roadway:	Van Buren Blvd								
Road Segment:	North of Colorado Ave	-							
	PROJECT DATA			S	ITE DATA				
Centerline Dist to E	Barrier ()	Road Grade:		0				
Barrier (0=wall, 1=	berm):)	Average Dail	y Traffic:	35200				
Receiver Barrier Di	ist: ()	Peak Hour Ti	raffic:	3520				
Centerline Dist. To	Observer: 100)	Vehicle Speed: 40						
Barrier Near Lane	CL Dist: ()	Centerline Se	eparation:	45				
Barrier Far lane CL	. Dist:)	NOISE INPUTS						
Pad Elevation:	0.4	5	Site condition	ns HARD S	ITE				
Road Elevation:	()		F	LEET MIX				
Observer Height (a	bove grade):)	Туре	Day	Evening	Night	Daily		
Barrier Height:	()	Auto	0.775	0.129	0.096	0.9742		
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184		
NOISE S	OURCE ELEVATIONS	(Feet)	Heavy Truck	0.865	0.027	0.108	0.0074		
Autos:)		•	•	•			
Medium Trucks:	2.3	3							
Heavy Trucks:		3							

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	56.8	65.6	63.8	57.7	66.4	67.0			
Medium Trucks:	65.8	57.7	51.3	49.7	58.2	58.5			
Heavy Trucks:	70.6	58.7	49.6	50.8	60.6	60.7			
Vehicle Noise:	73.0	67.2	64.3	59.3	67.9	68.4			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	825					
65 dBA	261					
70 dBA	83					
Mitigated						
60 dBA						
65 dBA						
70 dBA						



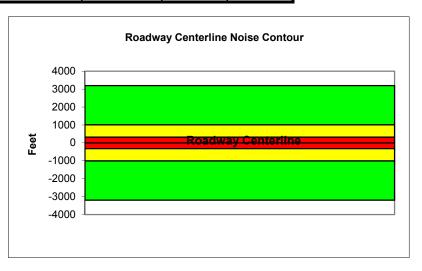
Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Existing Analyst: Ryan Richards Job #: 158820 Roadway: Van Buren Blvd Road Segment: North of Colorado Ave. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 62200 Peak Hour Traffic: Receiver Barrier Dist: 0 6220 Centerline Dist. To Observer: Vehicle Speed: 100 55 Barrier Near Lane CL Dist: Centerline Separation: 0 75 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 **NOISE SOURCE ELEVATIONS (Feet)** Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0 Medium Trucks: 2.3

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	62.9	71.6	69.9	63.8	72.4	73.0	
Medium Trucks:	70.0	61.9	55.5	54.0	62.5	62.7	
Heavy Trucks:	73.9	62.0	53.0	54.2	63.4	63.6	
Vehicle Noise:	76.3	72.6	70.1	64.7	73.3	73.8	

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	3196						
65 dBA	1011						
70 dBA	320						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



Project Name: Riverside Housing Element Update Scenario: Existing
Analyst: Ryan Richards Job #: 158820

Roadway: Victoria Ave.

Heavy Trucks:

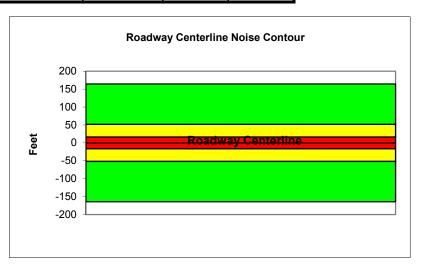
Road Segment: West of Van Buren Blvd.

PR	OJECT DATA			S	ITE DATA		
Centerline Dist to Barrie	r 0		Road Grade:		0		
Barrier (0=wall, 1= berm	n): 0		Average Dail	y Traffic:	7000		
Receiver Barrier Dist:	0		Peak Hour Tr	affic:	700		
Centerline Dist. To Obse	erver: 100		Vehicle Spee	d:	40		
Barrier Near Lane CL D	ist: 0		Centerline Se	eparation:	55		
Barrier Far lane CL Dist	: 0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	is HARD S i	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above	grade): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOUR	CE ELEVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0					•	
Medium Trucks:	2.3						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	49.7	58.4	56.6	50.6	59.2	59.8	
Medium Trucks:	58.6	50.5	44.2	42.6	51.1	51.3	
Heavy Trucks:	63.5	51.5	42.5	43.7	53.4	53.5	
Vehicle Noise:	65.8	60.0	57.1	52.1	60.7	61.2	

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:							
Medium Trucks:							
Heavy Trucks:							
Vehicle Noise:							

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	164					
65 dBA	52					
70 dBA	16					
Mitigated						
60 dBA						
65 dBA						
70 dBA						



Job #:

158820

Project Name: Riverside Housing Element Update Scenario: Existing Plus Project

Ryan Richards Analyst: Roadway: Alessandro Blvd

Road Segment: East of Mission Grove Pkwy

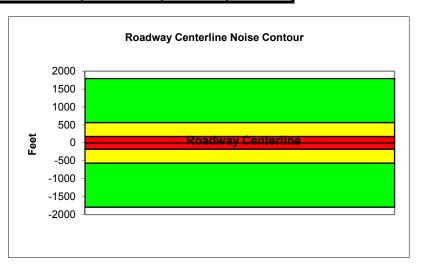
Heavy Trucks:

	PROJECT	DATA			S	ITE DATA		
Centerline Dist t	o Barrier	0		Road Grade:		0		
Barrier (0=wall,	1= berm):	0		Average Dail	y Traffic:	44400		
Receiver Barrier	Dist:	0		Peak Hour Tr	raffic:	4440		
Centerline Dist.	To Observer:	100		Vehicle Spee	ed:	50		
Barrier Near Lar	ne CL Dist:	0		Centerline Se	eparation:	65		
Barrier Far lane	CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:		0.5		Site condition	ns HARD S	ITE		
Road Elevation:		0			F	LEET MIX		
Observer Heigh	t (above grade):	0		Туре	Day	Evening	Night	Daily
Barrier Height:		0		Auto	0.775	0.129	0.096	0.9742
Rt View:	90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE	SOURCE ELE	VATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:		0			•	•	•	•
Medium Trucks:		2.3						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	60.3	69.1	67.3	61.2	69.9	70.5	
Medium Trucks:	68.0	59.9	53.6	52.0	60.5	60.7	
Heavy Trucks:	72.2	60.3	51.2	52.5	61.9	62.0	
Vehicle Noise:	74.5	70.2	67.6	62.3	70.9	71.5	

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:							
Medium Trucks:							
Heavy Trucks:							
Vehicle Noise:							

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	1794					
65 dBA	567					
70 dBA	179					
Mitigated						
60 dBA						
65 dBA						
70 dBA						

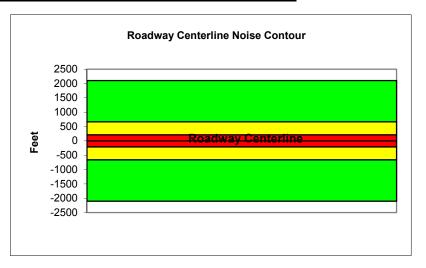


	Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)							
Project Name:	Riverside Housing Element U	Jpdate		Scenario:	Existing PI	us Project		
Analyst:	Ryan Richards			Job #:	158820			
Roadway:	Alessandro Blvd							
Road Segment:	North of Via Vista							
	PROJECT DATA			S	ITE DATA			
Centerline Dist to E	Barrier 0		Road Grade:		0			
Barrier (0=wall, 1=	berm): 0		Average Dail	y Traffic:	52100			
Receiver Barrier Di	st: 0		Peak Hour Tr	raffic:	5210			
Centerline Dist. To	Observer: 100		Vehicle Speed: 50					
Barrier Near Lane	CL Dist: 0		Centerline Se	eparation:	50			
Barrier Far lane CL	. Dist: 0			NO	ISE INPUT	S		
Pad Elevation:	0.5		Site condition	ns HARD S	TE			
Road Elevation:	0			F	LEET MIX			
Observer Height (a	bove grade): 0		Туре	Day	Evening	Night	Daily	
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742	
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184	
NOISE S	OURCE ELEVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074	
Autos:	0			-				
Medium Trucks:	2.3							
Heavy Trucks:	8							

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	61.2	70.0	68.2	62.1	70.8	71.4			
Medium Trucks:	68.9	60.8	54.5	52.9	61.4	61.6			
Heavy Trucks:	73.1	61.2	52.1	53.4	62.8	62.9			
Vehicle Noise:	75.5	71.1	68.5	63.2	71.8	72.4			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	2104				
65 dBA	665				
70 dBA	210				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



Job #:

158820

FLEET MIX

Project Name: Riverside Housing Element Update Scenario: Existing Plus Project

Analyst: Ryan Richards Roadway: Alessandro Blvd

Road Segment: West of Sycamore Canyon

PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 44400 Peak Hour Traffic: Receiver Barrier Dist: 0 4440 Centerline Dist. To Observer: Vehicle Speed: 100 55 Barrier Near Lane CL Dist: Centerline Separation: 0 60 Barrier Far lane CL Dist: 0 **NOISE INPUTS**

Pad Elevation:

Road Elevation:

Observer Height (above grade):

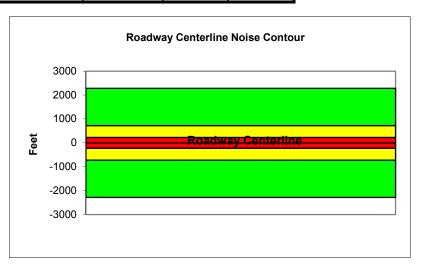
Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 NOISE SOURCE ELEVATIONS (Feet) Heavy Truck 0.865 0.027 0.108 0.0074

Autos: 0
Medium Trucks: 2.3
Heavy Trucks: 8

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	61.6	70.4	68.6	62.5	71.1	71.8			
Medium Trucks:	68.7	60.7	54.3	52.7	61.2	61.4			
Heavy Trucks:	72.7	60.7	51.7	52.9	62.2	62.3			
Vehicle Noise:	75.0	71.3	68.8	63.4	72.0	72.6			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	2281					
65 dBA	721					
70 dBA	228					
Mitigated						
60 dBA						
65 dBA						
70 dBA						



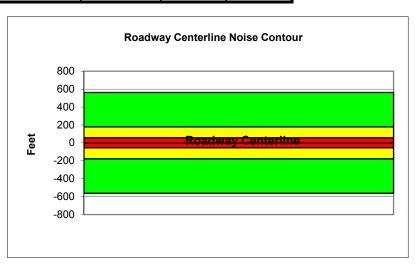
Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO) Project Name: Riverside Housing Element Update Scenario: Existing Plus Project Ryan Richards Analyst: Job #: 158820 Roadway: Arlington Avenue Road Segment: East of Brockton Ave

5							
PROJECT		S	ITE DATA				
Centerline Dist to Barrier	0		Road Grade: 0				
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	24000		
Receiver Barrier Dist:	0		Peak Hour Tr	raffic:	2400		
Centerline Dist. To Observer:	100		Vehicle Spee	ed:	40		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	32		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	ns HARD S	ITE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade)	: 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE ELE	VATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						
Heavy Trucks:	8						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	55.4	64.1	62.3	56.3	64.9	65.5			
Medium Trucks:	64.3	56.2	49.9	48.3	56.8	57.0			
Heavy Trucks:	69.2	57.2	48.2	49.4	59.1	59.2			
Vehicle Noise:	71.5	65.7	62.8	57.8	66.4	66.9			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	563				
65 dBA	178				
70 dBA	56				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



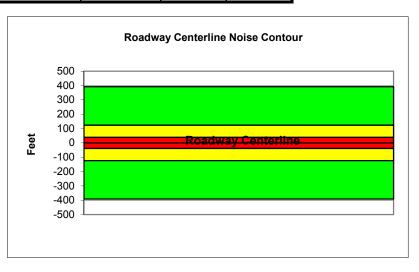
Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Existing Plus Project Analyst: Ryan Richards Job #: 158820 California Ave. Roadway: Road Segment: East of Adams St. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 16700 Peak Hour Traffic: Receiver Barrier Dist: 0 1670 Centerline Dist. To Observer: Vehicle Speed: 100 40 Barrier Near Lane CL Dist: Centerline Separation: 0 36 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 NOISE SOURCE ELEVATIONS (Feet) Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0 Medium Trucks: 2.3

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	53.7	62.5	60.7	54.6	63.3	63.9			
Medium Trucks:	62.7	54.6	48.2	46.6	55.1	55.4			
Heavy Trucks:	67.5	55.6	46.5	47.7	57.5	57.6			
Vehicle Noise:	69.9	64.1	61.2	56.2	64.8	65.3			

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	392					
65 dBA	124					
70 dBA	39					
Mitigated						
60 dBA						
65 dBA						
70 dBA						



Project Name: Riverside Housing Element Update Scenario: Existing Plus Project

Analyst: Ryan Richards Job #: 158820

Roadway: California Ave.

Heavy Trucks:

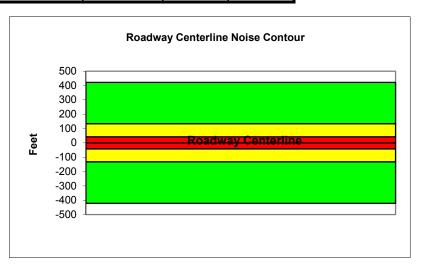
Road Segment: East of Van Buren Blvd.

PROJEC	Γ DATA			S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	18000		
Receiver Barrier Dist:	0		Peak Hour Tr	raffic:	1800		
Centerline Dist. To Observer:	100		Vehicle Spee	ed:	40		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	36		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	ns HARD S I	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade	e): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE EL	NOISE SOURCE ELEVATIONS (Feet)			0.865	0.027	0.108	0.0074
Autos:	0			•			
Medium Trucks:	2.3						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	54.0	62.8	61.0	54.9	63.6	64.2	
Medium Trucks:	63.0	54.9	48.5	47.0	55.5	55.7	
Heavy Trucks:	67.8	55.9	46.8	48.1	57.8	57.9	
Vehicle Noise:	70.2	64.4	61.5	56.5	65.1	65.6	

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOIS	SE CONTOUR
Unmitigated	
60 dBA	422
65 dBA	133
70 dBA	42
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Existing Plus Project Analyst: Ryan Richards Job #: 158820 Chicago Ave Roadway: Road Segment: North of Spruce St. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 14600 Peak Hour Traffic: Receiver Barrier Dist: 0 1460 Centerline Dist. To Observer: Vehicle Speed: 45 100 Barrier Near Lane CL Dist: Centerline Separation: 0 42 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 **NOISE SOURCE ELEVATIONS (Feet)** Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	54.5	63.3	61.5	55.4	64.1	64.7	
Medium Trucks:	62.8	54.7	48.3	46.8	55.3	55.5	
Heavy Trucks:	67.3	55.4	46.3	47.5	57.1	57.2	
Vehicle Noise:	69.6	64.6	61.9	56.7	65.3	65.8	

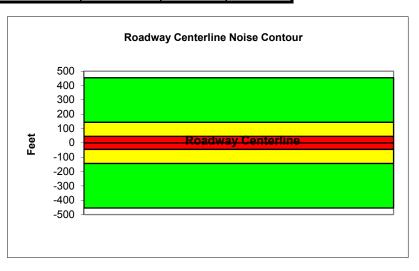
2.3

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	454					
65 dBA	144					
70 dBA	45					
Mitigated						
60 dBA						
65 dBA						
70 dBA						

Medium Trucks:



Project Name: Riverside Housing Element Update Scenario: Existing Plus Project

Analyst: Ryan Richards Job #: 158820

Roadway: Indiana Ave.
Road Segment: East of Harrison St.

PROJECT DATA

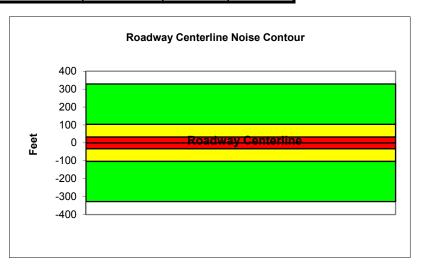
======================================							
PROJECT DATA	SITE DATA						
Centerline Dist to Barrier 0		Road Grade:		0			
Barrier (0=wall, 1= berm):		Average Dail	y Traffic:	14000			
Receiver Barrier Dist: 0		Peak Hour Tr	affic:	1400			
Centerline Dist. To Observer: 100		Vehicle Spee	d:	40			
Barrier Near Lane CL Dist: 0		Centerline Se	eparation:	36			
Barrier Far lane CL Dist: 0			NO	ISE INPUT	S		
Pad Elevation: 0.5		Site condition	is HARD S I	TE			
Road Elevation: 0			F	LEET MIX			
Observer Height (above grade): 0		Туре	Day	Evening	Night	Daily	
Barrier Height: 0		Auto	0.775	0.129	0.096	0.9742	
Rt View: 90 Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184	
NOISE SOURCE ELEVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074	

Autos: 0
Medium Trucks: 2.3
Heavy Trucks: 8

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	52.9	61.7	59.9	53.9	62.5	63.1	
Medium Trucks:	61.9	53.8	47.5	45.9	54.4	54.6	
Heavy Trucks:	66.7	54.8	45.8	47.0	56.7	56.8	
Vehicle Noise:	69.1	63.3	60.4	55.4	64.0	64.5	

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	328						
65 dBA	104						
70 dBA	33						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



Project Name: Riverside Housing Element Update Scenario: Existing Plus Project

Analyst: Ryan Richards Job #: 158820

Roadway: Jackson St.

Road Segment: North of Indiana Ave.

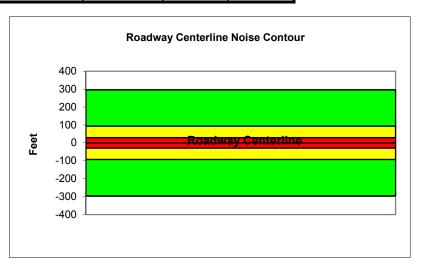
PROJECT		S	ITE DATA				
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	12600		
Receiver Barrier Dist:	0		Peak Hour Tr	raffic:	1260		
Centerline Dist. To Observer:	100		Vehicle Spee	ed:	40		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	42		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	ns HARD S I	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade):	0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE ELE	VATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074

Autos: 0
Medium Trucks: 2.3
Heavy Trucks: 8

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	52.4	61.2	59.4	53.3	62.0	62.6			
Medium Trucks:	61.3	53.3	46.9	45.3	53.8	54.0			
Heavy Trucks:	66.2	54.3	45.2	46.4	56.1	56.3			
Vehicle Noise:	68.6	62.8	59.8	54.9	63.5	63.9			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type Peak Leq Leq Day Leq Evening Leq Night Ldn Cl									
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	295						
65 dBA	93						
70 dBA	30						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



Project Name: Riverside Housing Element Update Scenario: Existing Plus Project

Analyst: Ryan Richards Job #: 158820

Roadway: La Sierra Ave.

Heavy Trucks:

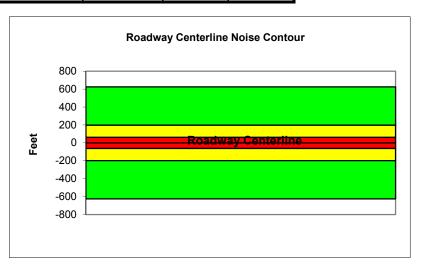
Road Segment: Magnolia Ave. to Collett Ave.

PROJECT DATA				S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Daily	y Traffic:	26700		
Receiver Barrier Dist:	0		Peak Hour Tr	raffic:	2670		
Centerline Dist. To Observ	rer: 100		Vehicle Spee	ed:	40		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	50		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	is HARD S i	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above gr	rade): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE	ELEVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						•
Medium Trucks:	2.3						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	55.5	64.3	62.5	56.4	65.1	65.7			
Medium Trucks:	64.5	56.4	50.0	48.5	57.0	57.2			
Heavy Trucks:	69.3	57.4	48.3	49.6	59.3	59.4			
Vehicle Noise:	71.7	65.9	63.0	58.0	66.6	67.1			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type Peak Leq Leq Day Leq Evening Leq Night Ldn CN									
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	625						
65 dBA	198						
70 dBA	63						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO) Project Name: Riverside Housing Element Update

Scenario: Existing Plus Project

Ryan Richards Analyst: Job #: 158820

Roadway: La Sierra Ave.

Heavy Trucks:

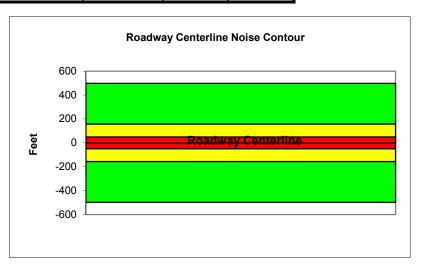
Road Segment: North of Cypress Ave.

PROJECT DATA				S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	16000		
Receiver Barrier Dist:	0		Peak Hour Tr	raffic:	1600		
Centerline Dist. To Observer:	100		Vehicle Spee	ed:	45		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	50		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	ns HARD S I	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE EL	EVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	54.8	63.6	61.8	55.7	64.3	65.0			
Medium Trucks:	63.1	55.0	48.6	47.0	55.5	55.8			
Heavy Trucks:	67.6	55.6	46.6	47.8	57.4	57.5			
Vehicle Noise:	69.9	64.9	62.1	57.0	65.6	66.1			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type Peak Leq Leq Day Leq Evening Leq Night Ldn Ch									
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	498				
65 dBA	157				
70 dBA	50				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Existing Plus Project Analyst: Ryan Richards Job #: 158820 Roadway: La Sierra Ave. Road Segment: North of Pierce St. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 27600 Peak Hour Traffic: Receiver Barrier Dist: 0 2760 Centerline Dist. To Observer: Vehicle Speed: 40 100 Barrier Near Lane CL Dist: Centerline Separation: 0 50 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184

Heavy Truck

0.865

0.027

0.108

0.0074

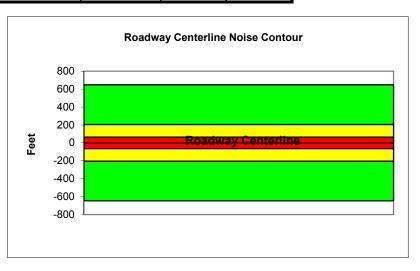
Autos:	U
Medium Trucks:	2.3
Heavy Trucks:	8

NOISE SOURCE ELEVATIONS (Feet)

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	55.7	64.5	62.7	56.6	65.2	65.8
Medium Trucks:	64.6	56.6	50.2	48.6	57.1	57.3
Heavy Trucks:	69.5	57.5	48.5	49.7	59.4	59.5
Vehicle Noise:	71.9	66.0	63.1	58.2	66.8	67.2

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	647				
65 dBA	205				
70 dBA	65				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



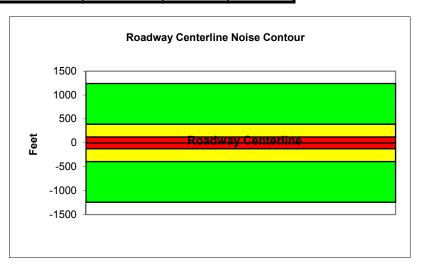
Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Existing Plus Project Analyst: Ryan Richards Job #: 158820 Roadway: La Sierra Ave. Road Segment: North of SR-91 PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 39900 Peak Hour Traffic: 3990 Receiver Barrier Dist: 0 Centerline Dist. To Observer: Vehicle Speed: 100 45 Barrier Near Lane CL Dist: Centerline Separation: 0 50 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 NOISE SOURCE ELEVATIONS (Feet) Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0 Medium Trucks: 2.3

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)					1)	
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	58.8	67.5	65.7	59.7	68.3	68.9
Medium Trucks:	67.0	59.0	52.6	51.0	59.5	59.7
Heavy Trucks:	71.6	59.6	50.6	51.8	61.3	61.5
Vehicle Noise:	73.9	68.8	66.1	61.0	69.6	70.1

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	1242				
65 dBA	393				
70 dBA	124				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO) Project Name: Riverside Housing Element Update Scenario:

Project Name: Riverside Housing Element Update Scenario: Existing Plus Project

Analyst: Job #: 158820

Analyst: Ryan Richards Roadway: Lincoln Ave

Road Segment: West of Monroe St.

PROJECT D	PROJECT DATA			
Centerline Dist to Barrier	0	Road Grade:	0	
Barrier (0=wall, 1= berm):	0	Average Daily Traffic:	9900	
Receiver Barrier Dist:	0	Peak Hour Traffic:	990	
Centerline Dist. To Observer:	100	Vehicle Speed:	45	
Barrier Near Lane CL Dist:	0	Centerline Separation:	36	
Barrier Far lane CL Dist:	0	NO	ISE INPUTS	
Pad Elevation:	0.5	Site conditions HARD SITE		
Road Flevation:	0	FI FFT MIX		

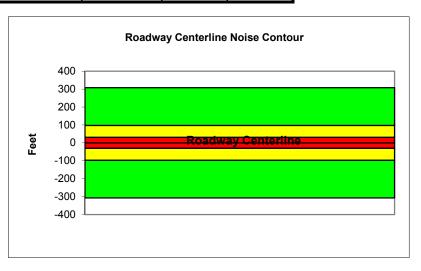
ad Elevation: 0 Observer Height (above grade): Туре Day Evening Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 -90 Med. Truck Rt View: 90 Lft View: 0.848 0.049 0.103 0.0184 NOISE SOURCE ELEVATIONS (Feet) 0.0074 Heavy Truck 0.865 0.027 0.108

Autos: 0
Medium Trucks: 2.3
Heavy Trucks: 8

UNMITIG	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)					1)
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	52.9	61.7	59.9	53.8	62.5	63.1
Medium Trucks:	61.2	53.1	46.7	45.2	53.7	53.9
Heavy Trucks:	65.7	53.8	44.7	45.9	55.5	55.6
Vehicle Noise:	68.1	63.0	60.3	55.1	63.7	64.2

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	307				
65 dBA	97				
70 dBA	31				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Existing Plus Project Analyst: Ryan Richards Job #: 158820 Roadway: Magnolia Ave. Road Segment: East of Harrison St. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 33400 Peak Hour Traffic: 3340 Receiver Barrier Dist: 0 Centerline Dist. To Observer: Vehicle Speed: 100 40 Barrier Near Lane CL Dist: Centerline Separation: 0 50 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Night Daily Type Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 NOISE SOURCE ELEVATIONS (Feet) Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)											
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL					
Autos:	56.5	65.3	63.5	57.4	66.1	66.7					
Medium Trucks:	65.5	57.4	51.0	49.4	57.9	58.2					
Heavy Trucks:	70.3	58.4	49.3	50.5	60.3	60.4					
Vehicle Noise:	72.7	66.9	64.0	59.0	67.6	68.1					

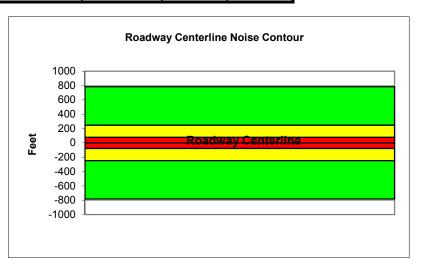
2.3

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR								
Unmitigated								
60 dBA	784							
65 dBA	248							
70 dBA	78							
Mitigated								
60 dBA								
65 dBA								
70 dBA								

Medium Trucks:



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Existing Plus Project Analyst: Ryan Richards Job #: 158820 Roadway: Magnolia Ave. Road Segment: East of Jackson St. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 24300 Peak Hour Traffic: Receiver Barrier Dist: 0 2430 Centerline Dist. To Observer: Vehicle Speed: 100 40 Barrier Near Lane CL Dist: Centerline Separation: 0 50 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Evening Day Night Daily Type Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 **NOISE SOURCE ELEVATIONS (Feet)** Heavy Truck 0.865 0.027 0.108 0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)											
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL					
Autos:	55.1	63.9	62.1	56.0	64.7	65.3					
Medium Trucks:	64.1	56.0	49.6	48.1	56.5	56.8					
Heavy Trucks:	68.9	57.0	47.9	49.2	58.9	59.0					

62.6

57.6

0

8

2.3

65.5

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR								
Unmitigated								
60 dBA	569							
65 dBA	180							
70 dBA	57							
Mitigated								
60 dBA								
65 dBA								
70 dBA								

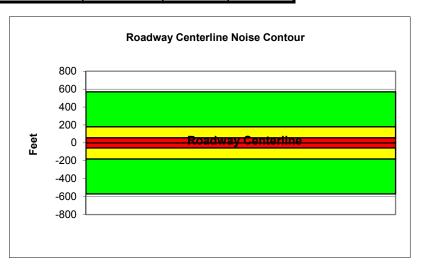
71.3

Autos:

Medium Trucks:

Heavy Trucks:

Vehicle Noise:



66.2

66.7

Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Existing Plus Project Ryan Richards Analyst: Job #:

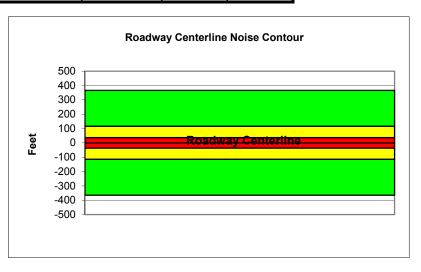
Roadway: Magnolia Ave. Road Segment: South of Jurupa Ave.

PROJEC		S	ITE DATA				
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	21200		
Receiver Barrier Dist:	0		Peak Hour Tr	affic:	2120		
Centerline Dist. To Observer:	100		Vehicle Spee	ed:	35		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	36		
Barrier Far lane CL Dist:	0		NOISE INPUTS				
Pad Elevation:	0.5		Site condition	is HARD S	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grad	e): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE E	LEVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						
Heavy Trucks:	8						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)											
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL					
Autos:	53.1	61.9	60.1	54.0	62.6	63.2					
Medium Trucks:	62.8	54.7	48.3	46.8	55.3	55.5					
Heavy Trucks:	68.0	56.1	47.0	48.2	58.1	58.3					
Vehicle Noise:	70.5	63.8	60.6	55.9	64.5	65.0					

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR								
Unmitigated								
60 dBA	365							
65 dBA	116							
70 dBA	37							
Mitigated								
60 dBA								
65 dBA								
70 dBA								



Project Name: Riverside Housing Element Update Scenario: Existing Plus Project

Analyst: Ryan Richards Job #: 158820

Roadway: Magnolia Ave.

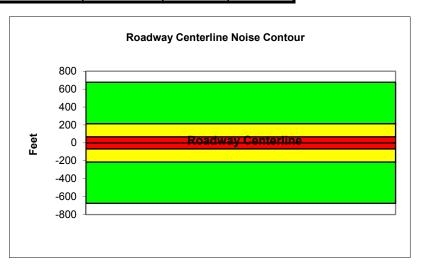
Road Segment: SR-91 WB Off-Ramp to SR-91 WB On-Ramp

	PROJECT DATA				S	ITE DATA		
Centerline Dis	st to Barrier	0		Road Grade:		0		
Barrier (0=wa	III, 1= berm):	0		Average Dail	y Traffic:	28800		
Receiver Bar	rier Dist:	0		Peak Hour Tr	raffic:	2880		
Centerline Dis	st. To Observer:	100		Vehicle Spee	ed:	40		
Barrier Near I	Barrier Near Lane CL Dist: 0			Centerline Se	eparation:	80		
Barrier Far la	ne CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation	1:	0.5		Site condition	ns HARD S	ITE		
Road Elevation	on:	0			F	LEET MIX		
Observer Hei	ght (above grade)): 0		Туре	Day	Evening	Night	Daily
Barrier Heigh	t:	0		Auto	0.775	0.129	0.096	0.9742
Rt View:	90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NO	SE SOURCE ELI	EVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:		0						
Medium Truc	ks:	2.3						
Heavy Trucks	:	8						

UNMITIG	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)											
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL						
Autos:	55.5	64.3	62.5	56.4	65.0	65.6						
Medium Trucks:	64.4	56.4	50.0	48.4	56.9	57.1						
Heavy Trucks:	69.3	57.3	48.3	49.5	59.2	59.3						
Vehicle Noise:	71.6	65.8	62.9	58.0	66.5	67.0						

MITIGAT	MITIGATED NOISE LEVELS (With topographic or barrier attenuation)											
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL						
Autos:												
Medium Trucks:												
Heavy Trucks:												
Vehicle Noise:												

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	676						
65 dBA	214						
70 dBA	68						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



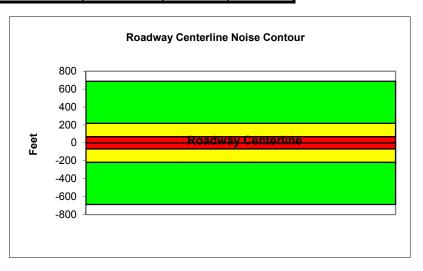
	Federal Highway Administration RD-77-108									
		Traffic Noise Pr		on Model (CA						
Project Name:	Riverside Ho	ousing Element Upo	late	Scenario: Existing Plus Project						
Analyst:	Ryan Richai	rds			Job #:	158820				
Roadway:	Magnolia Av	re.								
Road Segment:	West of Tyle	er St.								
	PROJECT I	DATA			S	ITE DATA				
Centerline Dist to	Barrier	0		Road Grade:		0				
Barrier (0=wall, 1=	berm):	0		Average Daily Traffic:		29300				
Receiver Barrier D	Dist:	0		Peak Hour Traffic: 2930						
Centerline Dist. To	Observer:	100		Vehicle Speed: 40						
Barrier Near Lane	CL Dist:	0		Centerline Se		50				
Barrier Far lane C	L Dist:	0			NO	ISE INPUT	S			
Pad Elevation:		0.5		Site condition	is HARD S	ITE				
Road Elevation:		0			F	LEET MIX				
Observer Height (above grade):	0		Туре	Day	Evening	Night	Daily		
Barrier Height:		0		Auto	0.775	0.129	0.096	0.9742		
Rt View: 9	0	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184		
NOISE S	SOURCE ELE	VATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074		
Autos:		0				•	•			
Medium Trucks:		2.3								

UNMITIG	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)												
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL							
Autos:	55.9	64.7	62.9	56.9	65.5	66.1							
Medium Trucks:	64.9	56.8	50.4	48.9	57.4	57.6							
Heavy Trucks:	69.7	57.8	48.7	50.0	59.7	59.8							
Vehicle Noise:	72.1	66.3	63.4	58.4	67.0	67.5							

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)											
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL					
Autos:											
Medium Trucks:											
Heavy Trucks:											
Vehicle Noise:											

CENTERLINE NOISE CONTOUR								
Unmitigated								
60 dBA	687							
65 dBA	217							
70 dBA	69							
Mitigated								
60 dBA								
65 dBA								
70 dBA								



Project Name: Riverside Housing Element Update Scenario: Existing Plus Project

Analyst: Ryan Richards Job #: 158820

Roadway: Martin Luther King Blvd.

Road Segment: East of Iowa Ave.

Medium Trucks:

Heavy Trucks:

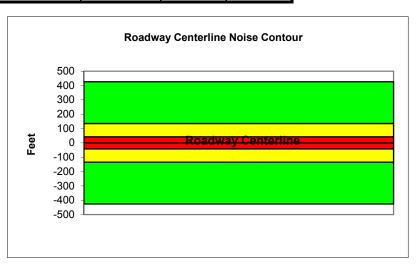
	PROJECT DATA				S	ITE DATA		
Centerline D	ist to Barrier	0		Road Grade: 0				
Barrier (0=wa	all, 1= berm):	0		Average Daily Traffic: 24700				
Receiver Bar	rier Dist:	0		Peak Hour Tr	raffic:	2470		
Centerline D	ist. To Observer:	100		Vehicle Spee	ed:	35		
Barrier Near	Lane CL Dist:	0	O Centerline Separation:					
Barrier Far la	ne CL Dist:	0			NO	ISE INPUT	S	
Pad Elevatio	n:	0.5		Site condition	is HARD S i	TE		
Road Elevati	on:	0			F	LEET MIX		
Observer He	ight (above grad	e): 0		Туре	Day	Evening	Night	Daily
Barrier Heigh	nt:	0		Auto	0.775	0.129	0.096	0.9742
Rt View:	90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NO	NOISE SOURCE ELEVATIONS (Feet)			Heavy Truck	0.865	0.027	0.108	0.0074
Autos:		0						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)											
Vehicle Type Peak Leq Leq Day Leq Evening Leq Night Ldn C											
Autos:	53.6	62.4	60.6	54.5	63.1	63.8					
Medium Trucks:	63.3	55.2	48.9	47.3	55.8	56.0					
Heavy Trucks:	68.5	56.6	47.5	48.8	58.7	58.8					
Vehicle Noise:	71.0	64.3	61.1	56.5	65.0	65.5					

2.3

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)											
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL					
Autos:											
Medium Trucks:											
Heavy Trucks:											
Vehicle Noise:											

CENTERLINE NOISE CONTOUR								
Unmitigated								
60 dBA	426							
65 dBA	135							
70 dBA	43							
Mitigated								
60 dBA								
65 dBA								
70 dBA								



Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO) Project Name: Riverside Housing Element Update Scenario: Existing Plus Project Analyst: Ryan Richards Job #: 158820

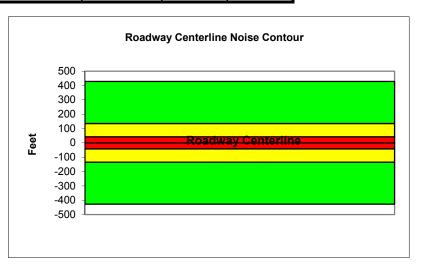
Roadway: Martin Luther King Blvd.
Road Segment: East of Kansas Ave.

PROJECT		S	ITE DATA				
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Daily Traffic:		24800		
Receiver Barrier Dist:	0		Peak Hour Tr	affic:	2480		
Centerline Dist. To Observer:	100		Vehicle Spee	d:	35		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	46		
Barrier Far lane CL Dist:	0		NOISE INPUTS				
Pad Elevation:	0.5		Site condition	is HARD S I	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade)): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
Rt View: 90 NOISE SOURCE ELI			Med. Truck Heavy Truck			0.103 0.108	
NOISE SOURCE EL							

UNMITIG	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)												
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL							
Autos:	53.6	62.4	60.6	54.5	63.2	63.8							
Medium Trucks:	63.3	55.3	48.9	47.3	55.8	56.0							
Heavy Trucks:	68.5	56.6	47.5	48.8	58.7	58.8							
Vehicle Noise:	71.0	64.3	61.2	56.5	65.0	65.5							

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	428						
65 dBA	135						
70 dBA	43						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



Project Name: Riverside Housing Element Update Scenario: Existing Plus Project

Analyst: Ryan Richards Job #: 158820

Roadway: Pierce St.

Medium Trucks:

Heavy Trucks:

Vehicle Noise:

Road Segment: West of La Sierra Ave.

PROJECT	DATA			S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	20100		
Receiver Barrier Dist:	0		Peak Hour Tr	raffic:	2010		
Centerline Dist. To Observer:	100		Vehicle Spee	ed:	40		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	45		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	ns HARD S I	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade)	: 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE ELE	EVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)											
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL					
Autos:	54.4	63.2	61.4	55.3	63.9	64.5					
Medium Trucks:	63.3	55.3	48.9	47.3	55.8	56.0					
Heavy Trucks:	68.2	56.2	47.2	48.4	58.1	58.2					

61.8

56.9

2.3

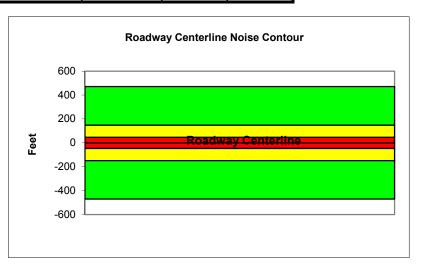
64.7

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	471						
65 dBA	149						
70 dBA	47						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

70.6



65.4

65.9

Project Name: Scenario: Existing Plus Project Riverside Housing Element Update

Ryan Richards Analyst: Job #: 158820

Roadway: Riverwalk Pkwy.

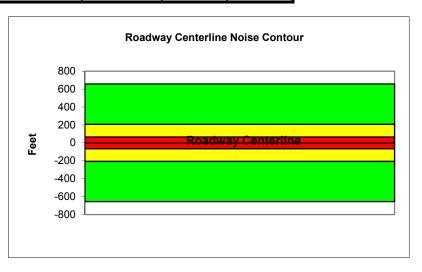
Road Segment: Sierra Vista Ave. to Raley Dr.

PROJEC	T DATA		SITE DATA					
Centerline Dist to Barrier	0		Road Grade:		0			
Barrier (0=wall, 1= berm):	Barrier (0=wall, 1= berm):		Average Daily Traffic:		28000			
Receiver Barrier Dist:	0		Peak Hour Traffic:		2800			
Centerline Dist. To Observer:	100		Vehicle Spee	d:	40			
Barrier Near Lane CL Dist:	0		Centerline Se	paration:	45			
Barrier Far lane CL Dist:	0		NOISE INPUTS					
Pad Elevation:	0.5		Site condition	is HARD S I	TE			
Road Elevation:	0			F	LEET MIX			
Observer Height (above grade	e): 0		Туре	Day	Evening	Night	Daily	
	_		A	0 775	0.400	0.000	0.9742	
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742	
Barrier Height: Rt View: 90	0 Lft View:		Med. Truck	0.775				
<u> </u>		-90			0.049		0.0184	
Rt View: 90		-90	Med. Truck	0.848	0.049	0.103	0.0184	
Rt View: 90 NOISE SOURCE EL		-90	Med. Truck	0.848	0.049	0.103	0.0184	

UNMITIGA	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL					
Autos:	55.8	64.6	62.8	56.7	65.4	66.0					
Medium Trucks:	64.8	56.7	50.3	48.7	57.2	57.5					
Heavy Trucks:	69.6	57.7	48.6	49.8	59.6	59.7					
Vehicle Noise:	72.0	66.2	63.3	58.3	66.9	67.4					

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR								
Unmitigated								
60 dBA	656							
65 dBA	207							
70 dBA	66							
Mitigated								
60 dBA								
65 dBA								
70 dBA								



Job #:

158820

Project Name: Riverside Housing Element Update Scenario: Existing Plus Project

Ryan Richards Analyst: Roadway: Trautwein Rd.

Heavy Trucks:

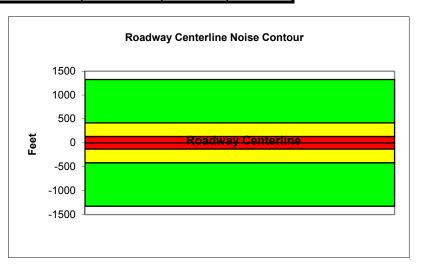
Road Segment: South of Alessandro Blvd.

	PROJECT	DATA			S	ITE DATA		
Centerline Dist	to Barrier	0		Road Grade:		0		
Barrier (0=wall,	1= berm):	0		Average Dail	y Traffic:	32800		
Receiver Barrie	r Dist:	0		Peak Hour Ti	raffic:	3280		
Centerline Dist.	To Observer:	100		Vehicle Spee	ed:	50		
Barrier Near La	ne CL Dist:	0		Centerline Se	eparation:	60		
Barrier Far lane	CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:		0.5		Site condition	ns HARD S	ITE		
Road Elevation	• •	0			F	LEET MIX		
Observer Heigh	it (above grade):	0		Туре	Day	Evening	Night	Daily
Barrier Height:		0		Auto	0.775	0.129	0.096	0.9742
Rt View:	90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOIS	E SOURCE ELE	VATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:		0				•		
Medium Trucks	:	2.3						

UNMITIG	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL					
Autos:	59.1	67.9	66.1	60.0	68.6	69.2					
Medium Trucks:	66.8	58.7	52.3	50.7	59.2	59.5					
Heavy Trucks:	71.0	59.0	50.0	51.2	60.6	60.7					
Vehicle Noise:	73.3	69.0	66.4	61.1	69.7	70.2					

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	1325				
65 dBA	419				
70 dBA	132				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



Job #:

158820

Project Name: Riverside Housing Element Update Scenario: Existing Plus Project

Analyst: Ryan Richards

Roadway: Tyler St.

Heavy Trucks:

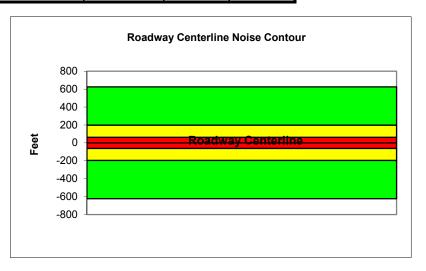
Road Segment: North of Magnolia Ave.

	O JEOT BATA				TE BATA		
PR	OJECT DATA			S	ITE DATA		
Centerline Dist to Barrie	er 0		Road Grade:		0		
Barrier (0=wall, 1= bern	n): 0		Average Dail	y Traffic:	26600		
Receiver Barrier Dist:	0		Peak Hour Tr	affic:	2660		
Centerline Dist. To Obs	erver: 100		Vehicle Spee	ed:	40		
Barrier Near Lane CL D	ist: 0		Centerline Se	eparation:	60		
Barrier Far lane CL Dist	:: 0		NOISE INPUTS				
Pad Elevation:	0.5		Site condition	is HARD S	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above	e grade): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOUR	CE ELEVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0					•	•
Medium Trucks:	2.3						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)						1)
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	55.4	64.2	62.4	56.3	64.9	65.5
Medium Trucks:	64.3	56.3	49.9	48.3	56.8	57.0
Heavy Trucks:	69.2	57.2	48.2	49.4	59.1	59.2
Vehicle Noise:	71.6	65.7	62.8	57.9	66.5	66.9

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	624				
65 dBA	197				
70 dBA	62				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Existing Plus Project Analyst: Ryan Richards Job #: 158820 Tyler St. Roadway: Road Segment: North of SR-91 PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 46500 Peak Hour Traffic: Receiver Barrier Dist: 0 4650 Centerline Dist. To Observer: Vehicle Speed: 100 35 Barrier Near Lane CL Dist: Centerline Separation: 0 60 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 **NOISE SOURCE ELEVATIONS (Feet)** Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)						1)
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	56.1	64.9	63.1	57.0	65.7	66.3
Medium Trucks:	65.9	57.8	51.4	49.8	58.3	58.6
Heavy Trucks:	71.1	59.1	50.1	51.3	61.2	61.3
Vehicle Noise:	73.5	66.9	63.7	59.0	67.6	68.0

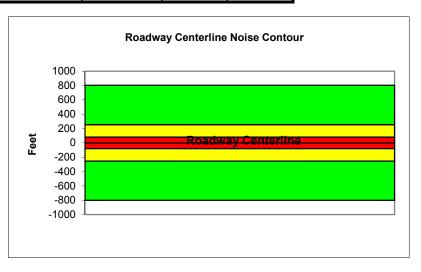
2.3

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	802				
65 dBA	254				
70 dBA	80				
Mitigated					
60 dBA					
65 dBA					
70 dBA					

Medium Trucks:



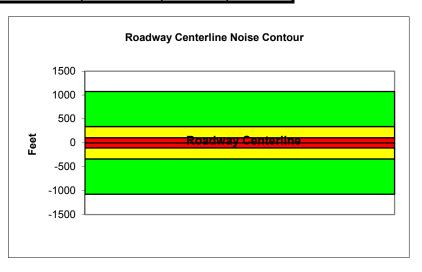
Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Existing Plus Project Analyst: Ryan Richards Job #: 158820 Roadway: Van Buren Blvd Road Segment: North of SR-91 PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 45800 Peak Hour Traffic: Receiver Barrier Dist: 0 4580 Centerline Dist. To Observer: Vehicle Speed: 40 100 Barrier Near Lane CL Dist: Centerline Separation: 0 60 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 NOISE SOURCE ELEVATIONS (Feet) Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0 Medium Trucks: 2.3

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)						1)
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	57.7	66.5	64.7	58.7	67.3	67.9
Medium Trucks:	66.7	58.6	52.2	50.7	59.2	59.4
Heavy Trucks:	71.5	59.6	50.5	51.8	61.5	61.6
Vehicle Noise:	73.9	68.1	65.2	60.2	68.8	69.3

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	1074				
65 dBA	340				
70 dBA	107				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



Project Name: Riverside Housing Element Update Scenario: Existing Plus Project

Analyst: Ryan Richards Job #: 158820

Roadway: Van Buren Blvd

Heavy Trucks:

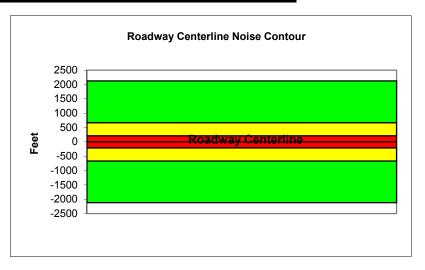
Road Segment: South of Cleveland Ave.

PF		S	ITE DATA				
Centerline Dist to Barri	er 0		Road Grade:		0		
Barrier (0=wall, 1= berr	m): 0		Average Dail	y Traffic:	41300		
Receiver Barrier Dist:	0		Peak Hour Tr	raffic:	4130		
Centerline Dist. To Obs	server: 100		Vehicle Spee	ed:	55		
Barrier Near Lane CL [Dist: 0		Centerline Se	eparation:	45		
Barrier Far lane CL Dis	it: 0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	ns HARD S	ITE		
Road Elevation:	0			F	LEET MIX		
Observer Height (abov	e grade): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOUR	RCE ELEVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0			•	•	•	•
Medium Trucks:	2.3						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	61.5	70.3	68.5	62.4	71.0	71.7				
Medium Trucks:	68.6	60.5	54.2	52.6	61.1	61.3				
Heavy Trucks:	72.6	60.6	51.6	52.8	62.1	62.2				
Vehicle Noise:	74.9	71.2	68.7	63.3	71.9	72.5				

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	2122						
65 dBA	671						
70 dBA	212						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



Project Name: Riverside Housing Element Update Scenario: Existing Plus Project

Analyst: Ryan Richards Job #: 158820

Roadway: Van Buren Blvd

Medium Trucks: Heavy Trucks:

Road Segment: West of Washington St.

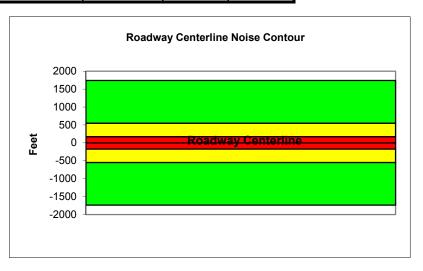
	PROJEC	CT DATA			S	ITE DATA		
Centerline Dis	st to Barrier	0		Road Grade: 0				
Barrier (0=wa	all, 1= berm):	0	1	Average Daily	y Traffic:	33800		
Receiver Bar	rier Dist:	0	1	Peak Hour Tr	raffic:	3380		
Centerline Di	ist. To Observer:	: 100		Vehicle Spee		55		
Barrier Near	Lane CL Dist:	0	1	Centerline Se	eparation:	40		
Barrier Far la	ine CL Dist:	0	1		NO	ISE INPUT	S	
Pad Elevation	n:	0.5	1	Site condition	is HARD S I	TE		
Road Elevation	on:	0			F	LEET MIX		
Observer Hei	ight (above grad	ie): 0		Туре	Day	Evening	Night	Daily
Barrier Heigh	ıt:	0		Auto	0.775	0.129	0.096	0.9742
Rt View:	90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NO	ISE SOURCE E	LEVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:		0						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	60.7	69.5	67.7	61.6	70.3	70.9			
Medium Trucks:	67.8	59.8	53.4	51.8	60.3	60.5			
Heavy Trucks:	71.8	59.8	50.8	52.0	61.3	61.4			
Vehicle Noise:	74.1	70.4	67.9	62.5	71.1	71.7			

2.3

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	1738						
65 dBA	550						
70 dBA	174						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



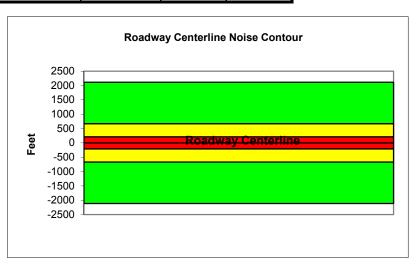
Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Existing Plus Project Analyst: Ryan Richards Job #: 158820 Van Buren Blvd Roadway: Road Segment: West of Wood Rd. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 41100 Peak Hour Traffic: Receiver Barrier Dist: 0 4110 Centerline Dist. To Observer: Vehicle Speed: 100 55 Barrier Near Lane CL Dist: Centerline Separation: 0 40 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Night Daily Type Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 **NOISE SOURCE ELEVATIONS (Feet)** Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0 Medium Trucks: 2.3

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	61.5	70.3	68.5	62.5	71.1	71.7				
Medium Trucks:	68.7	60.6	54.2	52.6	61.1	61.4				
Heavy Trucks:	72.6	60.7	51.6	52.9	62.1	62.2				
Vehicle Noise:	74.9	71.3	68.8	63.4	72.0	72.5				

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	2114						
65 dBA	668						
70 dBA	211						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO) Project Name: Riverside Housing Element Update Scenario: Existing Plus Project Analyst: Ryan Richards Job #: 158820 Roadway: Van Buren Blvd

Roadway: Van Buren Blvd Road Segment: North of Arlington Ave.

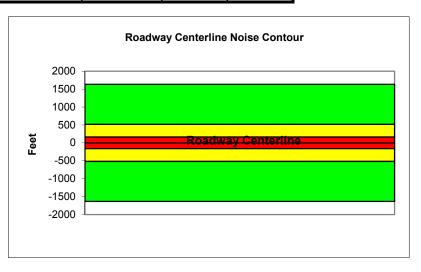
Heavy Trucks:

PROJECT	DATA			S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	52500		
Receiver Barrier Dist:	0		Peak Hour Tr	affic:	5250		
Centerline Dist. To Observer:	100		Vehicle Spee	ed:	45		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	65		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	is HARD S i	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade)	: 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE ELE	VATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	59.7	68.5	66.7	60.7	69.3	69.9				
Medium Trucks:	68.0	60.0	53.6	52.0	60.5	60.7				
Heavy Trucks:	72.5	60.6	51.5	52.8	62.3	62.4				
Vehicle Noise:	74.9	69.8	67.1	62.0	70.5	71.0				

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type Peak Leq Leq Day Leq Evening Leq Night Ldn Cl										
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	1632						
65 dBA	516						
70 dBA	163						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO) Project Name: Riverside Housing Element Update Scenario: Existing Plus Project

Analyst: Ryan Richards

Job #: 158820

Analyst: Ryan Richards Roadway: Van Buren Blvd

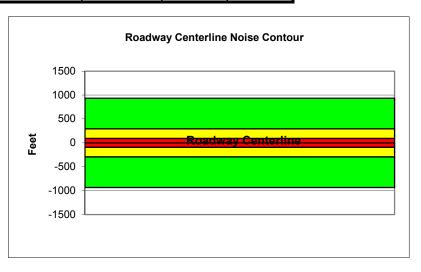
Road Segment: North of Colorado Ave.

PROJEC		S	ITE DATA				
Centerline Dist to Barrier	0		Road Grade: 0				
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	39800		
Receiver Barrier Dist:	0		Peak Hour Tr	affic:	3980		
Centerline Dist. To Observer:	100		Vehicle Spee	d:	40		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	45		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	is HARD S i	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade	e): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE EL	.EVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						
Heavy Trucks:	8						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	57.3	66.1	64.3	58.3	66.9	67.5				
Medium Trucks:	66.3	58.2	51.8	50.3	58.8	59.0				
Heavy Trucks:	71.1	59.2	50.2	51.4	61.1	61.2				
Vehicle Noise:	73.5	67.7	64.8	59.8	68.4	68.9				

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	933						
65 dBA	295						
70 dBA	93						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO) Project Name: Riverside Housing Element Update Scenario: Existing Plus Project Analyst: Ryan Richards Job #: 158820

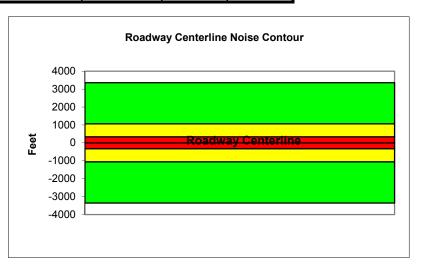
Roadway: Van Buren Blvd Road Segment: North of Colorado Ave.

PROJECT		S	ITE DATA				
Centerline Dist to Barrier	0		Road Grade: 0				
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	65200		
Receiver Barrier Dist:	0		Peak Hour Tr	affic:	6520		
Centerline Dist. To Observer:	100		Vehicle Spee	d:	55		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	75		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	is HARD S I	ΙΤΕ		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade):	0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE ELE	VATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						
Heavy Trucks:	8						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	63.1	71.8	70.1	64.0	72.6	73.2				
Medium Trucks:	70.2	62.1	55.7	54.2	62.7	62.9				
Heavy Trucks:	74.2	62.2	53.2	54.4	63.6	63.8				
Vehicle Noise:	76.5	72.8	70.3	64.9	73.5	74.0				

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	3354						
65 dBA	1061						
70 dBA	335						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



Project Name: Riverside Housing Element Update Scenario: Existing Plus Project

Analyst: Ryan Richards Job #:

Roadway: Victoria Ave.

Heavy Trucks:

Road Segment: West of Van Buren Blvd.

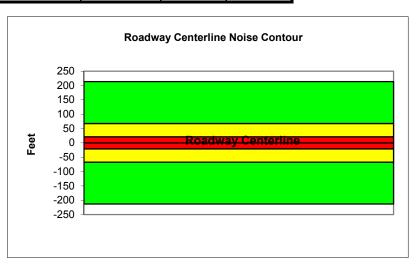
PROJECT	DATA			S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	9100		
Receiver Barrier Dist:	0		Peak Hour Tr	raffic:	910		
Centerline Dist. To Observer:	100		Vehicle Spee	ed:	40		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	55		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	is HARD S i	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade)): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE ELI	EVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						-
Medium Trucks:	2.3						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	50.8	59.6	57.8	51.7	60.4	61.0		
Medium Trucks:	59.7	51.7	45.3	43.7	52.2	52.4		
Heavy Trucks:	64.6	52.7	43.6	44.8	54.5	54.7		
Vehicle Noise:	67.0	61.2	58.2	53.3	61.9	62.3		

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	213						
65 dBA	67						
70 dBA	21						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



Project Name: Riverside Housing Element Update Scenario: Future Ryan Richards Analyst: Job #: 158820

Roadway: Alessandro Blvd

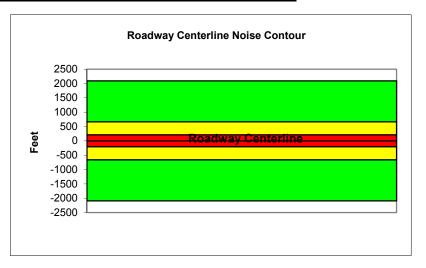
Road Segment: East of Mission Grove Pkwy

PROJEC		S	ITE DATA				
Centerline Dist to Barrier	0		Road Grade: 0				
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	51900		
Receiver Barrier Dist:	0		Peak Hour Tr	affic:	5190		
Centerline Dist. To Observer:	100		Vehicle Spee	d:	50		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	65		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	is HARD S I	TE		
Road Elevation:	0		FLEET MIX				
Nuau Elevation.	U			•	: :::::::		
Observer Height (above grade	e): 0		Туре	Day	Evening	Night	Daily
	e): 0		Type Auto	-	Evening	Night 0.096	
Observer Height (above grade	e): 0 0 Lft View:			Day	Evening 0.129	_	0.9742
Observer Height (above grade Barrier Height:	0 Lft View:	-90	Auto	Day 0.775	Evening 0.129 0.049	0.096	0.9742 0.0184
Observer Height (above grade Barrier Height: Rt View: 90	0 Lft View:	-90	Auto Med. Truck	Day 0.775 0.848	Evening 0.129 0.049	0.096 0.103	0.9742 0.0184
Observer Height (above grade Barrier Height: Rt View: 90 NOISE SOURCE EI	0 Lft View:	-90	Auto Med. Truck	Day 0.775 0.848	Evening 0.129 0.049	0.096 0.103	0.9742 0.0184

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	61.0	69.8	68.0	61.9	70.6	71.2		
Medium Trucks:	68.7	60.6	54.2	52.7	61.1	61.4		
Heavy Trucks:	72.9	61.0	51.9	53.1	62.5	62.7		
Vehicle Noise:	75.2	70.9	68.3	63.0	71.6	72.1		

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	2093						
65 dBA	662						
70 dBA	209						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

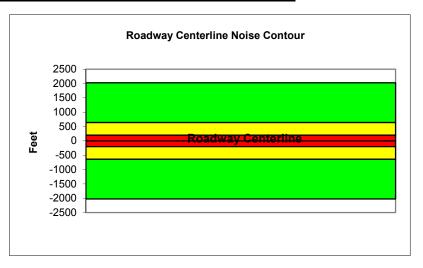


	Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)									
Project Name:	Riverside Ho	ousing Element U			Scenario:	Future				
Analyst:	Ryan Richar	ds	•		Job #:	158820				
Roadway:	Alessandro	Blvd								
Road Segment:	North of Via	Vista								
	PROJECT I	DATA			S	ITE DATA				
Centerline Dist to E	Barrier	0		Road Grade:		0				
Barrier (0=wall, 1=	berm):	0		Average Dail	y Traffic:	50100				
Receiver Barrier D	ist:	0		Peak Hour Tr	raffic:	5010				
Centerline Dist. To	Observer:	100		Vehicle Speed: 50						
Barrier Near Lane	CL Dist:	0		Centerline Separation: 50						
Barrier Far lane Cl	_ Dist:	0		NOISE INPUTS						
Pad Elevation:		0.5		Site conditions HARD SITE						
Road Elevation:		0			F	LEET MIX				
Observer Height (a	above grade):	0		Туре	Day	Evening	Night	Daily		
Barrier Height:		0		Auto	0.775	0.129	0.096	0.9742		
Rt View: 90)	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184		
NOISE S	OURCE ELE	VATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074		
Autos:		0				•				
Medium Trucks:		2.3								
Heavy Trucks:		8								

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	61.1	69.8	68.1	62.0	70.6	71.2		
Medium Trucks:	68.7	60.7	54.3	52.7	61.2	61.4		
Heavy Trucks:	73.0	61.0	52.0	53.2	62.6	62.7		
Vehicle Noise:	75.3	70.9	68.4	63.1	71.7	72.2		

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	2023						
65 dBA	640						
70 dBA	202						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Future Ryan Richards Analyst: Job #: 158820 Roadway: Alessandro Blvd Road Segment: West of Sycamore Canyon PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 51800 Peak Hour Traffic: Receiver Barrier Dist: 0 5180 Centerline Dist. To Observer: Vehicle Speed: 100 55 Barrier Near Lane CL Dist: Centerline Separation: 0 60 Barrier Far lane CL Dist: **NOISE INPUTS** 0 Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Night Daily Type Barrier Height: Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184

Heavy Truck

0.865

0.027

0.108

0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	62.3	71.0	69.3	63.2	71.8	72.4		
Medium Trucks:	69.4	61.3	54.9	53.4	61.9	62.1		
Heavy Trucks:	73.3	61.4	52.4	53.6	62.8	63.0		
Vehicle Noise:	75.7	72.0	69.5	64.1	72.7	73.2		

0

8

2.3

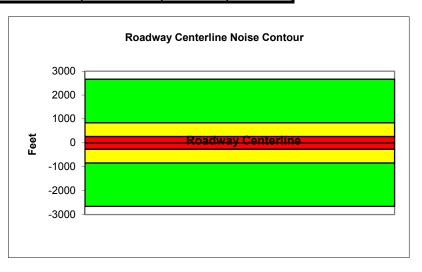
MITIGATED NOISE LEVELS (With topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	2661				
65 dBA	842				
70 dBA	266				
Mitigated					
60 dBA					
65 dBA					
70 dBA					

NOISE SOURCE ELEVATIONS (Feet)

Autos:

Medium Trucks:

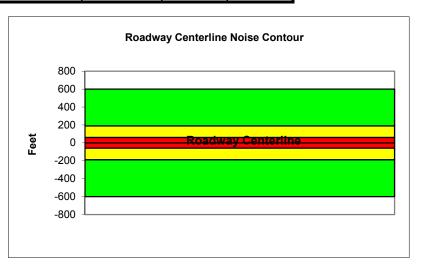


	Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)										
Project Name:	Riverside Housing El	ement Update		Scenario:	Future						
Analyst:	Ryan Richards			Job #:	158820						
Roadway:	Arlington Avenue										
Road Segment:	East of Brockton Ave	!									
	PROJECT DATA			S	ITE DATA						
Centerline Dist to E	Barrier	0	Road Grade:		0						
Barrier (0=wall, 1=	berm):	0	Average Dail	y Traffic:	25600						
Receiver Barrier Di	st:	0	Peak Hour Ti	raffic:	2560						
Centerline Dist. To	Observer: 10	00	Vehicle Speed: 40								
Barrier Near Lane	CL Dist:	0	Centerline Separation: 32								
Barrier Far lane CL	Dist:	0	NOISE INPUTS								
Pad Elevation:	0	.5	Site condition	ns HARD S	ITE						
Road Elevation:		0		F	LEET MIX						
Observer Height (a	bove grade):	0	Туре	Day	Evening	Night	Daily				
Barrier Height:		0	Auto	0.775	0.129	0.096	0.9742				
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184				
NOISE SOURCE ELEVATIONS (Feet)			Heavy Truck	0.865	0.027	0.108	0.0074				
Autos:		0		•	•						
Medium Trucks:	2	.3									
Heavy Trucks:		8									

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	55.6	64.4	62.6	56.5	65.2	65.8				
Medium Trucks:	64.6	56.5	50.1	48.6	57.1	57.3				
Heavy Trucks:	69.4	57.5	48.4	49.7	59.4	59.5				
Vehicle Noise:	71.8	66.0	63.1	58.1	66.7	67.2				

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	600						
65 dBA	190						
70 dBA	60						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

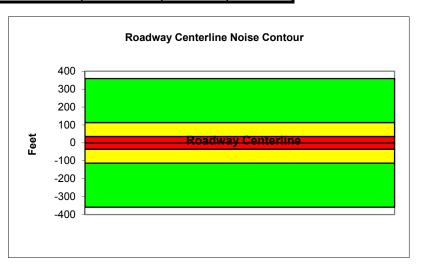


	Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)									
Project Name:	Riverside Housing	Element Update	·	Scenario:	Future					
Analyst:	Ryan Richards	·		Job #:	158820					
Roadway:	California Ave.									
Road Segment:	East of Adams St.									
	PROJECT DATA			S	ITE DATA					
Centerline Dist to E	Barrier	0	Road Grade:		0					
Barrier (0=wall, 1=	berm):	0	Average Dail	y Traffic:	15300					
Receiver Barrier Di	st:	0	Peak Hour Ti	raffic:	1530					
Centerline Dist. To	Observer:	100	Vehicle Spee	Vehicle Speed: 40						
Barrier Near Lane	CL Dist:	0	Centerline Se	eparation:	36					
Barrier Far lane CL	. Dist:	0		NO	ISE INPUT	S				
Pad Elevation:		0.5	Site condition	ns HARD S	ITE					
Road Elevation:		0		F	LEET MIX					
Observer Height (a	bove grade):	0	Туре	Day	Evening	Night	Daily			
Barrier Height:		0	Auto	0.775	0.129	0.096	0.9742			
Rt View: 90	Lft Viev	w: -90	Med. Truck	0.848	0.049	0.103	0.0184			
NOISE S	OURCE ELEVATIO	NS (Feet)	Heavy Truck	0.865	0.027	0.108	0.0074			
Autos:		0								
Medium Trucks:		2.3								
Heavy Trucks:		8								

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	53.3	62.1	60.3	54.2	62.9	63.5				
Medium Trucks:	62.3	54.2	47.8	46.3	54.8	55.0				
Heavy Trucks:	67.1	55.2	46.1	47.4	57.1	57.2				
Vehicle Noise:	69.5	63.7	60.8	55.8	64.4	64.9				

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	359						
65 dBA	113						
70 dBA	36						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Future Analyst: Ryan Richards Job #: 158820 Roadway: California Ave. Road Segment: East of Van Buren Blvd. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 14700 Peak Hour Traffic: Receiver Barrier Dist: 0 1470 Centerline Dist. To Observer: Vehicle Speed: 100 40 Barrier Near Lane CL Dist: Centerline Separation: 0 36 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 NOISE SOURCE ELEVATIONS (Feet) Heavy Truck 0.865 0.027 0.108 0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	53.2	61.9	60.2	54.1	62.7	63.3			
Medium Trucks:	62.1	54.0	47.7	46.1	54.6	54.8			
Heavy Trucks:	67.0	55.0	46.0	47.2	56.9	57.0			
Vehicle Noise:	69.3	63.5	60.6	55.6	64.2	64.7			

0

8

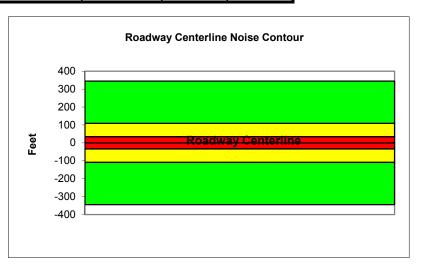
2.3

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	344						
65 dBA	109						
70 dBA	34						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

Autos:

Medium Trucks:

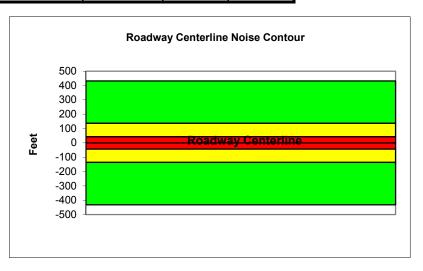


	Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)									
Project Name:	Riverside Housing Ele	ment Update	-	Scenario:	Future					
Analyst:	Ryan Richards			Job #:	158820					
Roadway:	Chicago Ave									
Road Segment:	North of Spruce St.									
	PROJECT DATA			S	ITE DATA					
Centerline Dist to Ba	arrier	0	Road Grade:		0					
Barrier (0=wall, 1= b	perm):	0	Average Dail	y Traffic:	13900					
Receiver Barrier Dis	st:	0	Peak Hour Tr	affic:	1390					
Centerline Dist. To	Observer: 10	0	Vehicle Speed: 45							
Barrier Near Lane C	CL Dist:	0	Centerline Se	eparation:	42					
Barrier Far lane CL	Dist:	0		NO	ISE INPUT	S				
Pad Elevation:	0.9	5	Site condition	is HARD S	ITE					
Road Elevation:		0		F	LEET MIX					
Observer Height (ab	oove grade):	0	Туре	Day	Evening	Night	Daily			
Barrier Height:		0	Auto	0.775	0.129	0.096	0.9742			
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184			
NOISE SC	OURCE ELEVATIONS	(Feet)	Heavy Truck	0.865	0.027	0.108	0.0074			
Autos:		0								
Medium Trucks:	2.3	3								
Heavy Trucks:	1	8								

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	54.3	63.1	61.3	55.2	63.9	64.5				
Medium Trucks:	62.6	54.5	48.1	46.6	55.0	55.3				
Heavy Trucks:	67.1	55.2	46.1	47.3	56.9	57.0				
Vehicle Noise:	69.4	64.4	61.7	56.5	65.1	65.6				

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	432					
65 dBA	137					
70 dBA	43					
Mitigated						
60 dBA						
65 dBA						
70 dBA						

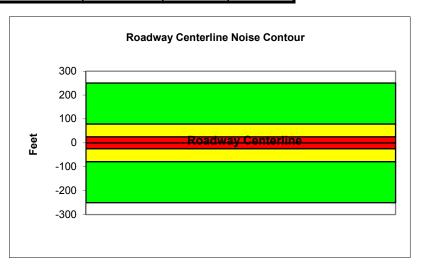


Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)									
Project Name:	Riverside Housing E	lement Update	•	Scenario:	Future				
Analyst:	Ryan Richards			Job #:	158820				
Roadway:	Indiana Ave.								
Road Segment:	East of Harrison St.								
	PROJECT DATA			S	ITE DATA				
Centerline Dist to Ba	arrier	0	Road Grade:		0				
Barrier (0=wall, 1= b	perm):	0	Average Dail	y Traffic:	10700				
Receiver Barrier Dis	st:	0	Peak Hour T	raffic:	1070				
Centerline Dist. To	Observer: 1	00	Vehicle Spee	Vehicle Speed:					
Barrier Near Lane C	CL Dist:	0	Centerline Se	eparation:	36				
Barrier Far lane CL	Dist:	0		NO	ISE INPUT	S			
Pad Elevation:		0.5	Site condition	ns HARD S	TE				
Road Elevation:		0		F	LEET MIX				
Observer Height (at	oove grade):	0	Туре	Day	Evening	Night	Daily		
Barrier Height:		0	Auto	0.775	0.129	0.096	0.9742		
Rt View: 90	Lft View	: -90	Med. Truck	0.848	0.049	0.103	0.0184		
NOISE SO	OURCE ELEVATION	S (Feet)	Heavy Truck	0.865	0.027	0.108	0.0074		
Autos:		0							
Medium Trucks:	;	2.3							
Heavy Trucks:		8							

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	51.8	60.6	58.8	52.7	61.3	61.9				
Medium Trucks:	60.7	52.7	46.3	44.7	53.2	53.4				
Heavy Trucks:	65.6	53.6	44.6	45.8	55.5	55.6				
Vehicle Noise:	68.0	62.1	59.2	54.3	62.8	63.3				

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	251					
65 dBA	79					
70 dBA	25					
Mitigated						
60 dBA						
65 dBA						
70 dBA						



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Future Analyst: Ryan Richards Job #: 158820 Roadway: Jackson St. Road Segment: North of Indiana Ave. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 11500 Receiver Barrier Dist: Peak Hour Traffic: 0 1150 Centerline Dist. To Observer: Vehicle Speed: 100 40 Barrier Near Lane CL Dist: Centerline Separation: 0 42 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742

-90 Med. Truck

Heavy Truck

Autos: 0
Medium Trucks: 2.3
Heavy Trucks: 8

90

Rt View:

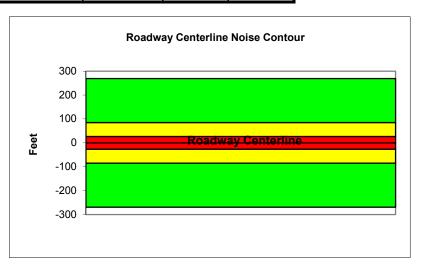
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	52.0	60.8	59.0	52.9	61.6	62.2				
Medium Trucks:	61.0	52.9	46.5	44.9	53.4	53.7				
Heavy Trucks:	65.8	53.9	44.8	46.0	55.7	55.9				
Vehicle Noise:	68.2	62.4	59.4	54.5	63.1	63.5				

Lft View:

NOISE SOURCE ELEVATIONS (Feet)

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	269					
65 dBA	85					
70 dBA	27					
Mitigated						
60 dBA						
65 dBA						
70 dBA						



0.848

0.865

0.049

0.027

0.103

0.108

0.0184

Project Name: Riverside Housing Element Update Scenario: Future
Analyst: Ryan Richards Job #: 158820

Roadway: La Sierra Ave.

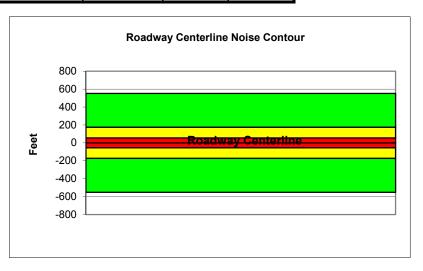
Road Segment: Magnolia Ave. to Collett Ave.

PROJEC	T DATA			S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	23500		
Receiver Barrier Dist:	0		Peak Hour Tr	affic:	2350		
Centerline Dist. To Observer:	100		Vehicle Spee	d:	40		
Barrier Near Lane CL Dist:	0		Centerline Se	paration:	50		
Barrier Far lane CL Dist:	0		NOISE INPUTS				
Pad Elevation:	0.5		Site condition	is HARD S I	TE		
Road Elevation:	0		FLEET MIX				
Nodu Licvation.	•			•			
Observer Height (above grade	e): 0		Туре	Day		Night	Daily
	e): 0		Type Auto	-	Evening	Night 0.096	
Observer Height (above grade	e): 0 0 Lft View:	-90		Day	Evening 0.129	_	0.9742
Observer Height (above grade Barrier Height:	0 Lft View:		Auto	Day 0.775	Evening 0.129 0.049	0.096	0.9742 0.0184
Observer Height (above grade Barrier Height: Rt View: 90	0 Lft View:		Auto Med. Truck	Day 0.775 0.848	Evening 0.129 0.049	0.096 0.103	0.9742 0.0184
Observer Height (above grade Barrier Height: Rt View: 90 NOISE SOURCE EI	0 Lft View:		Auto Med. Truck	Day 0.775 0.848	Evening 0.129 0.049	0.096 0.103	0.9742 0.0184

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	55.0	63.8	62.0	55.9	64.5	65.2				
Medium Trucks:	63.9	55.9	49.5	47.9	56.4	56.6				
Heavy Trucks:	68.8	56.8	47.8	49.0	58.7	58.9				
Vehicle Noise:	71.2	65.3	62.4	57.5	66.1	66.5				

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	551					
65 dBA	174					
70 dBA	55					
Mitigated						
60 dBA						
65 dBA						
70 dBA						



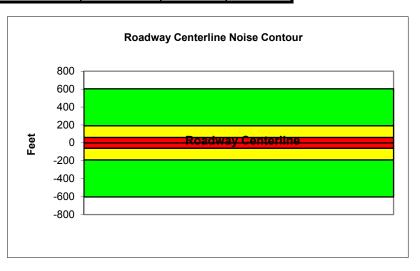
Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Future Ryan Richards Analyst: Job #: 158820 Roadway: La Sierra Ave. Road Segment: North of Cypress Ave. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 19400 Peak Hour Traffic: 1940 Receiver Barrier Dist: 0 Centerline Dist. To Observer: Vehicle Speed: 100 45 Barrier Near Lane CL Dist: Centerline Separation: 0 50 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 NOISE SOURCE ELEVATIONS (Feet) Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0 Medium Trucks: 2.3

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	55.6	64.4	62.6	56.5	65.2	65.8			
Medium Trucks:	63.9	55.8	49.5	47.9	56.4	56.6			
Heavy Trucks:	68.4	56.5	47.4	48.6	58.2	58.3			
Vehicle Noise:	70.8	65.7	63.0	57.8	66.4	66.9			

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	603						
65 dBA	191						
70 dBA	60						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

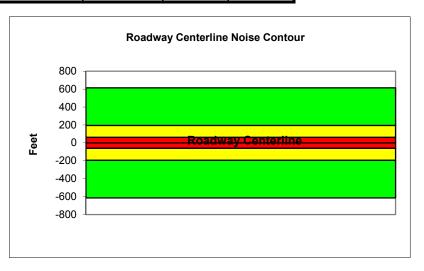


	Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)							
Project Name:	Riverside Housing	Element Update	·	Scenario:	Future			
Analyst:	Ryan Richards			Job #:	158820			
Roadway:	La Sierra Ave.							
Road Segment:	North of Pierce St.							
	PROJECT DATA			S	ITE DATA			
Centerline Dist to B	arrier	0	Road Grade:		0			
Barrier (0=wall, 1=	berm):	0	Average Dail	y Traffic:	26200			
Receiver Barrier Dis	st:	0	Peak Hour Ti	raffic:	2620			
Centerline Dist. To	Observer:	100	Vehicle Spee	ed:	40			
Barrier Near Lane (CL Dist:	0	Centerline Se	eparation:	50			
Barrier Far lane CL	Dist:	0		NO	ISE INPUT	S		
Pad Elevation:		0.5	Site condition	ns HARD S	ITE			
Road Elevation:		0		F	LEET MIX			
Observer Height (al	bove grade):	0	Туре	Day	Evening	Night	Daily	
Barrier Height:		0	Auto	0.775	0.129	0.096	0.9742	
Rt View: 90	Lft Viev	w: -9 0	Med. Truck	0.848	0.049	0.103	0.0184	
NOISE SO	OURCE ELEVATIO	NS (Feet)	Heavy Truck	0.865	0.027	0.108	0.0074	
Autos:		0						
Medium Trucks:		2.3						
Heavy Trucks:		8						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	55.5	64.2	62.4	56.4	65.0	65.6			
Medium Trucks:	64.4	56.3	50.0	48.4	56.9	57.1			
Heavy Trucks:	69.3	57.3	48.3	49.5	59.2	59.3			
Vehicle Noise:	71.6	65.8	62.9	57.9	66.5	67.0			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	614					
65 dBA	194					
70 dBA	61					
Mitigated						
60 dBA						
65 dBA						
70 dBA						

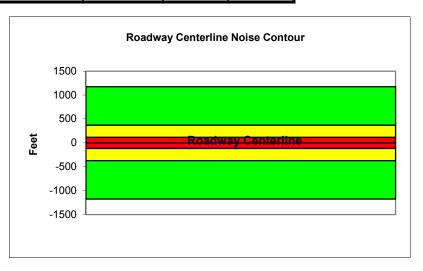


Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)							
Project Name:	Riverside Housing Ele		•	Scenario:	Future		
Analyst:	Ryan Richards	·		Job #:	158820		
Roadway:	La Sierra Ave.						
Road Segment:	North of SR-91						
	PROJECT DATA			S	ITE DATA		
Centerline Dist to Ba	arrier	0	Road Grade:		0		
Barrier (0=wall, 1= b	perm):	0	Average Dail	y Traffic:	37800		
Receiver Barrier Dis	st:	0	Peak Hour Tr	raffic:	3780		
Centerline Dist. To	Observer: 10	0	Vehicle Spee	ed:	45		
Barrier Near Lane C	CL Dist:	0	Centerline Se	eparation:	50		
Barrier Far lane CL	Dist:	0		NO	ISE INPUT	S	
Pad Elevation:	0.	.5	Site condition	ns HARD S	ITE		
Road Elevation:		0		F	LEET MIX		
Observer Height (at	oove grade):	0	Туре	Day	Evening	Night	Daily
Barrier Height:		0	Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SC	OURCE ELEVATIONS	G (Feet)	Heavy Truck	0.865	0.027	0.108	0.0074
Autos:		0					
Medium Trucks:	2.	.3					
Heavy Trucks:		8					

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	58.5	67.3	65.5	59.4	68.1	68.7			
Medium Trucks:	66.8	58.7	52.3	50.8	59.3	59.5			
Heavy Trucks:	71.3	59.4	50.3	51.5	61.1	61.2			
Vehicle Noise:	73.7	68.6	65.9	60.7	69.3	69.8			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	1175						
65 dBA	372						
70 dBA	118						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

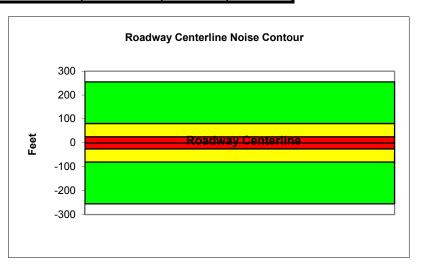


	Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)									
Project Name:	Riverside Housing Elen	nent Update		Scenario:	Future					
Analyst:	Ryan Richards			Job #:	158820					
Roadway:	Lincoln Ave									
Road Segment:	West of Monroe St.									
	PROJECT DATA			S	ITE DATA					
Centerline Dist to E	Barrier 0		Road Grade:		0					
Barrier (0=wall, 1=	berm): 0		Average Dail	y Traffic:	8200					
Receiver Barrier Di	st: 0		Peak Hour Ti	raffic:	820					
Centerline Dist. To	Observer: 100		Vehicle Speed: 45							
Barrier Near Lane (CL Dist: 0		Centerline Separation: 36							
Barrier Far lane CL	Dist: 0		NOISE INPUTS							
Pad Elevation:	0.5		Site condition	ns HARD S	ITE					
Road Elevation:	0			F	LEET MIX					
Observer Height (a	bove grade): 0		Туре	Day	Evening	Night	Daily			
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742			
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184			
NOISE S	OURCE ELEVATIONS (Feet)	Heavy Truck	0.865	0.027	0.108	0.0074			
Autos:	0									
Medium Trucks:	2.3									
Heavy Trucks:	8									

UNMITIG	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)											
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL						
Autos:	52.1	60.9	59.1	53.0	61.7	62.3						
Medium Trucks:	60.4	52.3	45.9	44.4	52.8	53.1						
Heavy Trucks:	64.9	53.0	43.9	45.1	54.7	54.8						
Vehicle Noise:	67.2	62.2	59.5	54.3	62.9	63.4						

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	255						
65 dBA	81						
70 dBA	26						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

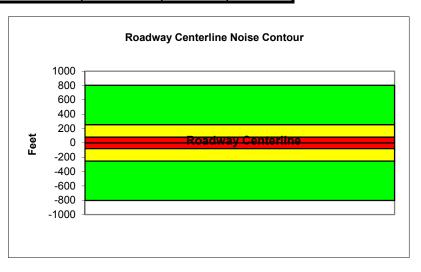


	Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)									
Project Name:	Riverside Hou	sing Element U	pdate	•	Scenario:	Future				
Analyst:	Ryan Richards	3			Job #:	158820				
Roadway:	Magnolia Ave.									
Road Segment:	East of Harriso	on St.								
	PROJECT DA	TΑ			S	ITE DATA				
Centerline Dist to E	Barrier	0		Road Grade:		0				
Barrier (0=wall, 1=	berm):	0		Average Dail	y Traffic:	34300				
Receiver Barrier D	ist:	0		Peak Hour Tr	raffic:	3430				
Centerline Dist. To	Observer:	100		Vehicle Speed: 40						
Barrier Near Lane	CL Dist:	0		Centerline Se	eparation:	50				
Barrier Far lane CL	₋ Dist:	0		NOISE INPUTS						
Pad Elevation:		0.5		Site condition	is HARD S	ITE				
Road Elevation:		0			F	LEET MIX				
Observer Height (a	above grade):	0		Туре	Day	Evening	Night	Daily		
Barrier Height:		0		Auto	0.775	0.129	0.096	0.9742		
Rt View: 90) Lfl	: View:	-90	Med. Truck	0.848	0.049	0.103	0.0184		
NOISE S	OURCE ELEVA	TIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074		
Autos:		0								
Medium Trucks:		2.3								
Heavy Trucks:		8								

UNMITIG	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)											
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL						
Autos:	56.6	65.4	63.6	57.5	66.2	66.8						
Medium Trucks:	65.6	57.5	51.1	49.6	58.0	58.3						
Heavy Trucks:	70.4	58.5	49.4	50.7	60.4	60.5						
Vehicle Noise:	72.8	67.0	64.1	59.1	67.7	68.2						

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	804						
65 dBA	254						
70 dBA	80						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

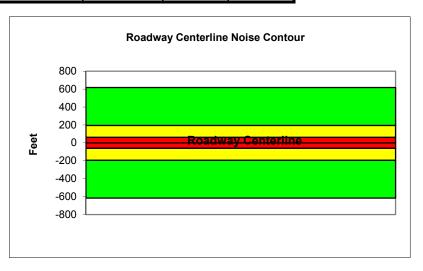


Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)									
Project Name:	Riverside Housing	Element Upo	date	-	Scenario:	Future			
Analyst:	Ryan Richards				Job #:	158820			
Roadway:	Magnolia Ave.								
Road Segment:	East of Jackson St	t.							
	PROJECT DATA				S	ITE DATA			
Centerline Dist to B	arrier	0		Road Grade:		0			
Barrier (0=wall, 1= b	perm):	0		Average Dail	y Traffic:	26300			
Receiver Barrier Dis	st:	0		Peak Hour Tr	affic:	2630			
Centerline Dist. To	Observer:	100		Vehicle Speed: 40					
Barrier Near Lane C	CL Dist:	0		Centerline Se	eparation:	50			
Barrier Far lane CL	Dist:	0		NOISE INPUTS					
Pad Elevation:		0.5		Site condition	is HARD S i	TE			
Road Elevation:		0			F	LEET MIX			
Observer Height (al	oove grade):	0		Туре	Day	Evening	Night	Daily	
Barrier Height:		0		Auto	0.775	0.129	0.096	0.9742	
Rt View: 90	Lft Vie	w:	-90	Med. Truck	0.848	0.049	0.103	0.0184	
NOISE SO	OURCE ELEVATION	NS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074	
Autos:		0							
Medium Trucks:		2.3							
Heavy Trucks:		8							

UNMITIG	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL					
Autos:	55.5	64.3	62.5	56.4	65.0	65.6					
Medium Trucks:	64.4	56.4	50.0	48.4	56.9	57.1					
Heavy Trucks:	69.3	57.3	48.3	49.5	59.2	59.3					
Vehicle Noise:	71.6	65.8	62.9	58.0	66.5	67.0					

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	617						
65 dBA	195						
70 dBA	62						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

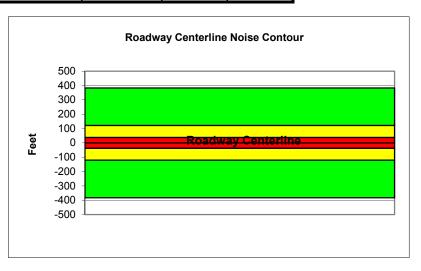


Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)										
Project Name:	Riverside Housing El	ement Update	-	Scenario:	Future					
Analyst:	Ryan Richards			Job #:	158820					
Roadway:	Magnolia Ave.									
Road Segment:	South of Jurupa Ave.									
	PROJECT DATA			S	ITE DATA					
Centerline Dist to B	arrier	0	Road Grade:		0					
Barrier (0=wall, 1= b	perm):	0	Average Dail	y Traffic:	22200					
Receiver Barrier Dis	st:	0	Peak Hour Ti	raffic:	2220					
Centerline Dist. To	Observer: 10	00	Vehicle Speed: 35							
Barrier Near Lane C	CL Dist:	0	Centerline Separation: 36							
Barrier Far lane CL	Dist:	0	NOISE INPUTS							
Pad Elevation:	0	.5	Site condition	ns HARD S	ITE					
Road Elevation:		0		F	LEET MIX					
Observer Height (al	oove grade):	0	Туре	Day	Evening	Night	Daily			
Barrier Height:		0	Auto	0.775	0.129	0.096	0.9742			
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184			
NOISE SO	OURCE ELEVATIONS	(Feet)	Heavy Truck	0.865	0.027	0.108	0.0074			
Autos:		0								
Medium Trucks:	2	.3								
Heavy Trucks:		8								

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	53.3	62.1	60.3	54.2	62.8	63.4				
Medium Trucks:	63.0	54.9	48.5	47.0	55.5	55.7				
Heavy Trucks:	68.2	56.3	47.2	48.4	58.3	58.5				
Vehicle Noise:	70.7	64.0	60.8	56.1	64.7	65.2				

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	383						
65 dBA	121						
70 dBA	38						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



Project Name: Riverside Housing Element Update Scenario: Future
Analyst: Ryan Richards Job #: 158820

Roadway: Magnolia Ave.

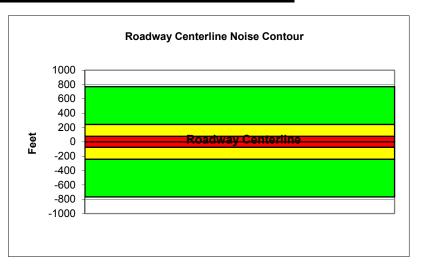
Road Segment: SR-91 WB Off-Ramp to SR-91 WB On-Ramp

PROJEC	T DATA			S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Daily	y Traffic:	32800		
Receiver Barrier Dist:	0		Peak Hour Tr	affic:	3280		
Centerline Dist. To Observer:	100		Vehicle Spee	d:	40		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	80		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	is HARD S i	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade	e): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE EL	EVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						
Heavy Trucks:	8						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	56.0	64.8	63.0	56.9	65.6	66.2			
Medium Trucks:	65.0	56.9	50.5	49.0	57.5	57.7			
Heavy Trucks:	69.8	57.9	48.8	50.1	59.8	59.9			
Vehicle Noise:	72.2	66.4	63.5	58.5	67.1	67.6			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	769						
65 dBA	243						
70 dBA	77						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

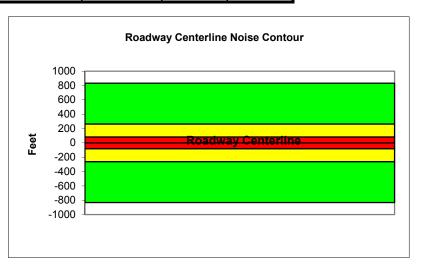


	Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)									
Project Name:	Riverside Hou	sing Element Upd		·	Scenario:	Future				
Analyst:	Ryan Richards	•			Job #:	158820				
Roadway:	Magnolia Ave.									
Road Segment:	West of Tyler									
	PROJECT DA	ATA			S	ITE DATA				
Centerline Dist to E	Barrier	0		Road Grade:		0				
Barrier (0=wall, 1=	berm):	0		Average Dail	y Traffic:	35500				
Receiver Barrier Di	ist:	0		Peak Hour Tr	raffic:	3550				
Centerline Dist. To	Observer:	100		Vehicle Speed: 40						
Barrier Near Lane	CL Dist:	0		Centerline Se	eparation:	50				
Barrier Far lane CL	Dist:	0		NOISE INPUTS						
Pad Elevation:		0.5		Site condition	ns HARD S	TE				
Road Elevation:		0			F	LEET MIX				
Observer Height (a	bove grade):	0		Туре	Day	Evening	Night	Daily		
Barrier Height:	- ,	0		Auto	0.775			0.9742		
Rt View: 90) Lf	t View:	-90	Med. Truck	0.848	0.049	0.103	0.0184		
NOISE S	OURCE ELEVA	ATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074		
Autos:		0								
Medium Trucks:		2.3								
Heavy Trucks:		8								

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	56.8	65.6	63.8	57.7	66.3	66.9			
Medium Trucks:	65.7	57.7	51.3	49.7	58.2	58.4			
Heavy Trucks:	70.6	58.6	49.6	50.8	60.5	60.6			
Vehicle Noise:	73.0	67.1	64.2	59.3	67.8	68.3			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	832					
65 dBA	263					
70 dBA	83					
Mitigated						
60 dBA						
65 dBA						
70 dBA						



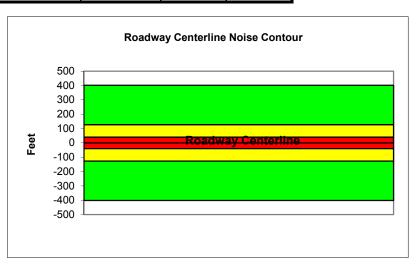
Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Future Analyst: Ryan Richards Job #: 158820 Martin Luther King Blvd. Roadway: East of Iowa Ave. Road Segment: PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 23300 Peak Hour Traffic: Receiver Barrier Dist: 0 2330 Centerline Dist. To Observer: Vehicle Speed: 100 35 Barrier Near Lane CL Dist: Centerline Separation: 0 46 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 NOISE SOURCE ELEVATIONS (Feet) Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0 Medium Trucks: 2.3

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	53.3	62.1	60.3	54.2	62.9	63.5	
Medium Trucks:	63.1	55.0	48.6	47.0	55.5	55.8	
Heavy Trucks:	68.3	56.3	47.3	48.5	58.4	58.5	
Vehicle Noise:	70.7	64.1	60.9	56.2	64.8	65.2	

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:							
Medium Trucks:							
Heavy Trucks:							
Vehicle Noise:							

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	402					
65 dBA	127					
70 dBA	40					
Mitigated						
60 dBA						
65 dBA						
70 dBA						

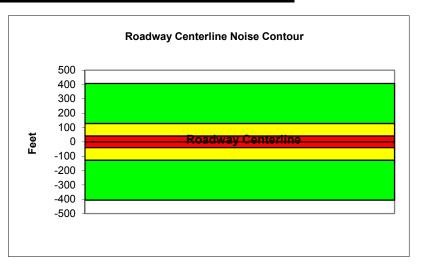


		al Highway Adm c Noise Prediction					
Project Name:	Riverside Housing Ele	ement Update		Scenario:	Future		
Analyst:	Ryan Richards			Job #:	158820		
Roadway:	Martin Luther King Bl	vd.					
Road Segment:	East of Kansas Ave.						
	PROJECT DATA			S	ITE DATA		
Centerline Dist to E	Barrier	0	Road Grade:		0		
Barrier (0=wall, 1=	berm):	0	Average Dail	y Traffic:	23600		
Receiver Barrier Di	st:	0	Peak Hour T	raffic:	2360		
Centerline Dist. To	Observer: 10	0	Vehicle Spee	ed:	35		
Barrier Near Lane	CL Dist:	0	Centerline Se	eparation:	46		
Barrier Far lane CL	. Dist:	0		NO	ISE INPUT	S	
Pad Elevation:	0.	.5	Site condition	ns HARD S	TE		
Road Elevation:		0		F	LEET MIX		
Observer Height (a	bove grade):	0	Туре	Day	Evening	Night	Daily
Barrier Height:		0	Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE S	OURCE ELEVATIONS	(Feet)	Heavy Truck	0.865	0.027	0.108	0.0074
Autos:		0		•		-	
Medium Trucks:	2.	.3					
Heavy Trucks:		8					

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	53.4	62.2	60.4	54.3	63.0	63.6	
Medium Trucks:	63.1	55.0	48.7	47.1	55.6	55.8	
Heavy Trucks:	68.3	56.4	47.3	48.6	58.5	58.6	
Vehicle Noise:	70.8	64.1	60.9	56.3	64.8	65.3	

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:							
Medium Trucks:							
Heavy Trucks:							
Vehicle Noise:							

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	407					
65 dBA	129					
70 dBA	41					
Mitigated						
60 dBA						
65 dBA						
70 dBA						



Project Name: Riverside Housing Element Update Scenario: Future
Analyst: Ryan Richards Job #: 158820

Roadway: Pierce St.

Medium Trucks:

Heavy Trucks:

Road Segment: West of La Sierra Ave.

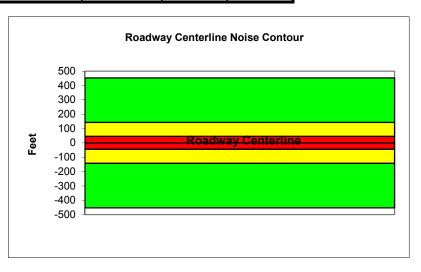
PROJEC		S	ITE DATA				
Centerline Dist to Barrier	0		Road Grade: 0				
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	19300		
Receiver Barrier Dist:	0		Peak Hour Tr	raffic:	1930		
Centerline Dist. To Observer:	100		Vehicle Spee	ed:	40		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	45		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	is HARD S	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grad	e): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE E	LEVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	54.2	63.0	61.2	55.1	63.8	64.4	
Medium Trucks:	63.2	55.1	48.7	47.1	55.6	55.9	
Heavy Trucks:	68.0	56.1	47.0	48.2	57.9	58.1	
Vehicle Noise:	70.4	64.6	61.6	56.7	65.3	65.8	

2.3

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:							
Medium Trucks:							
Heavy Trucks:							
Vehicle Noise:							

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	453					
65 dBA	143					
70 dBA	45					
Mitigated						
60 dBA						
65 dBA						
70 dBA						



Project Name: Riverside Housing Element Update Scenario: Future
Analyst: Ryan Richards Job #: 158820

Roadway: Riverwalk Pkwy.

Heavy Trucks:

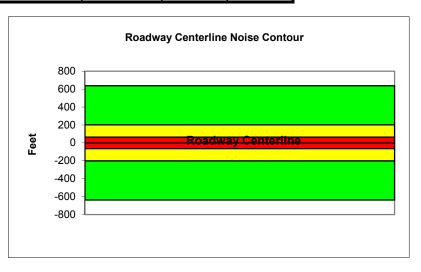
Road Segment: Sierra Vista Ave. to Raley Dr.

PROJECT		S	ITE DATA				
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	27200		
Receiver Barrier Dist:	0		Peak Hour Ti	raffic:	2720		
Centerline Dist. To Observer:	100		Vehicle Spee	ed:	40		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	45		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	is HARD S I	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade):	. 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE ELE	VATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	55.7	64.5	62.7	56.6	65.3	65.9			
Medium Trucks:	64.6	56.6	50.2	48.6	57.1	57.3			
Heavy Trucks:	69.5	57.6	48.5	49.7	59.4	59.6			
Vehicle Noise:	71.9	66.1	63.1	58.2	66.8	67.2			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	638						
65 dBA	202						
70 dBA	64						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Future Analyst: Ryan Richards Job #: 158820 Roadway: Trautwein Rd. South of Alessandro Blvd. Road Segment: PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 31100 Peak Hour Traffic: Receiver Barrier Dist: 0 3110 Centerline Dist. To Observer: Vehicle Speed: 100 50 Barrier Near Lane CL Dist: Centerline Separation: 0 60 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0.775 0.129 0.096 0.9742

Auto

-90 Med. Truck

Heavy Truck

Autos: 0 Medium Trucks: 2.3 Heavy Trucks: 8

90

Rt View:

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	58.9	67.6	65.8	59.8	68.4	69.0			
Medium Trucks:	66.5	58.5	52.1	50.5	59.0	59.2			
Heavy Trucks:	70.8	58.8	49.8	51.0	60.4	60.5			
Vehicle Noise:	73.1	68.7	66.2	60.9	69.5	70.0			

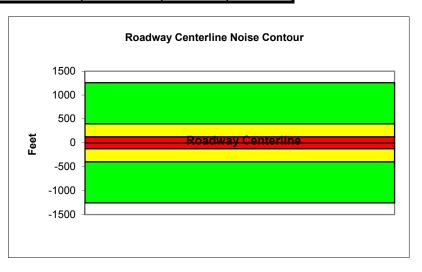
0

Lft View:

NOISE SOURCE ELEVATIONS (Feet)

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR								
Unmitigated								
60 dBA	1256							
65 dBA	397							
70 dBA	126							
Mitigated								
60 dBA								
65 dBA								
70 dBA								



0.848

0.865

0.049

0.027

0.103

0.108

0.0184

Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO) Project Name: Riverside Housing Element Update Scenario: Future Ryan Richards Analyst: Job #:

Roadway: Tyler St.

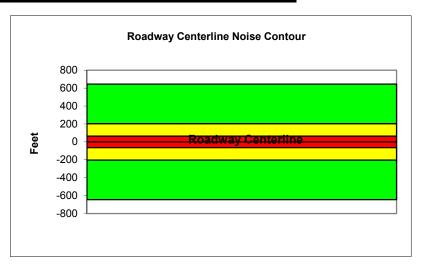
Road Segment: North of Magnolia Ave.

PROJECT		S	ITE DATA				
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	27500		
Receiver Barrier Dist:	0		Peak Hour Tr	affic:	2750		
Centerline Dist. To Observer:	100		Vehicle Spee	ed:	40		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	60		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	ns HARD S I	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade):	: 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE ELE	VATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						
Heavy Trucks:	8						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	55.5	64.3	62.5	56.4	65.1	65.7			
Medium Trucks:	64.5	56.4	50.0	48.5	56.9	57.2			
Heavy Trucks:	69.3	57.4	48.3	49.6	59.3	59.4			
Vehicle Noise:	71.7	65.9	63.0	58.0	66.6	67.1			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	644						
65 dBA	204						
70 dBA	64						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

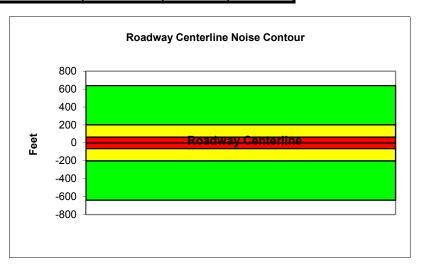


	Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)									
Project Name:	Riverside Housing		•	Scenario: Future						
Analyst:	Ryan Richards	•		Job #:	158820					
Roadway:	Tyler St.									
Road Segment:	North of SR-91									
	PROJECT DATA			S	ITE DATA					
Centerline Dist to E	Barrier	0	Road Grade:		0					
Barrier (0=wall, 1=	berm):	0	Average Dail	y Traffic:	37000					
Receiver Barrier D	ist:	0	Peak Hour Ti	raffic:	3700					
Centerline Dist. To	Observer:	100	Vehicle Spee	ed:	35					
Barrier Near Lane	CL Dist:	0	Centerline Se	eparation:	60					
Barrier Far lane CL	_ Dist:	0		NO	ISE INPUT	S				
Pad Elevation:		0.5	Site condition	ns HARD S	ITE					
Road Elevation:		0		F	LEET MIX					
Observer Height (a	bove grade):	0	Туре	Day	Evening	Night	Daily			
Barrier Height:		0	Auto	0.775	0.129	0.096	0.9742			
Rt View: 90	Lft Vie	ew: -90	Med. Truck	0.848	0.049	0.103	0.0184			
NOISE S	OURCE ELEVATION	NS (Feet)	Heavy Truck	0.865	0.027	0.108	0.0074			
Autos:		0								
Medium Trucks:		2.3								
Heavy Trucks:		8								

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	55.1	63.9	62.1	56.1	64.7	65.3		
Medium Trucks:	64.9	56.8	50.4	48.8	57.3	57.6		
Heavy Trucks:	70.1	58.1	49.1	50.3	60.2	60.3		
Vehicle Noise:	72.5	65.9	62.7	58.0	66.6	67.0		

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:							
Medium Trucks:							
Heavy Trucks:							
Vehicle Noise:							

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	638				
65 dBA	202				
70 dBA	64				
Mitigated					
60 dBA					
65 dBA					
70 dBA					

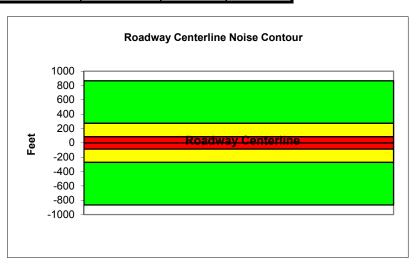


Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)								
Project Name:	Riverside Hous	ing Element Update	•	Scenario:	Future			
Analyst:	Ryan Richards			Job #:	158820			
Roadway:	Van Buren Blvd							
Road Segment:	North of SR-91							
	PROJECT DAT	ΓΑ		5	SITE DATA			
Centerline Dist to B	arrier	0	Road Grade:		0			
Barrier (0=wall, 1=	berm):	0	Average Dail	ly Traffic:	36900			
Receiver Barrier Di	st:	0	Peak Hour T	Peak Hour Traffic:				
Centerline Dist. To	Observer:	100	Vehicle Spee	Vehicle Speed:				
Barrier Near Lane (CL Dist:	0	Centerline Se	eparation:	60			
Barrier Far lane CL	Dist:	0	NOISE INPUTS					
Pad Elevation:		0.5	Site condition	ns HARD S	ITE			
Road Elevation:		0		F	LEET MIX			
Observer Height (a	bove grade):	0	Туре	Day	Evening	Night	Daily	
Barrier Height:		0	Auto	0.775	0.129	0.096	0.9742	
Rt View: 90	Lft '	View: -9	Med. Truck	0.848	0.049	0.103	0.0184	
NOISE SO	OURCE ELEVA	ΓΙΟΝS (Feet)	Heavy Truck	0.865	0.027	0.108	0.0074	
Autos:		0						
Medium Trucks:		2.3						
Heavy Trucks:		8						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	56.8	65.6	63.8	57.7	66.4	67.0		
Medium Trucks:	65.8	57.7	51.3	49.7	58.2	58.5		
Heavy Trucks:	70.6	58.7	49.6	50.8	60.5	60.7		
Vehicle Noise:	73.0	67.2	64.2	59.3	67.9	68.4		

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:							
Medium Trucks:							
Heavy Trucks:							
Vehicle Noise:							

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	865				
65 dBA	274				
70 dBA	87				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Future Analyst: Ryan Richards Job #: 158820 Roadway: Van Buren Blvd Road Segment: South of Cleveland Ave. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 38100 Peak Hour Traffic: Receiver Barrier Dist: 0 3810 Centerline Dist. To Observer: Vehicle Speed: 100 55 Barrier Near Lane CL Dist: Centerline Separation: 0 45 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Evening Day Night Daily Type Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184

68.1

53.8

51.2

Heavy Truck

62.0

52.2

52.5

Medium Trucks:		2.3				
Heavy Trucks:		8				
UNMITIC	SATED NOIS	E LEVELS	(No topograph	ic or barrier	attenuatior	າ)
Vehicle Type	Peak Leg	Leg Day	Lea Evenina	Lea Niaht	Ldn	

69.9

60.2

60.3

0

NOISE SOURCE ELEVATIONS (Feet)

61.1

68.3

72.2

Autos:

Autos:

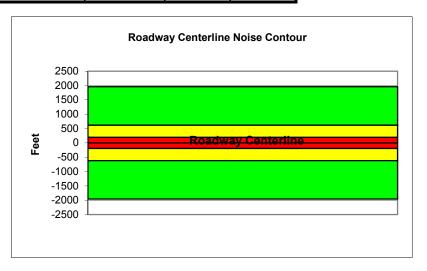
Medium Trucks:

Heavy Trucks:

Vehicle Noise:

Vehicle Noise:	74.5	70.9	68.4	63.0	71.6	72.1
MITIGAT	TED NOISE L	EVELS (W	ith topographi	c or barrier a	ttenuation	
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	1958				
65 dBA	619				
70 dBA	196				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



0.027

CNEL

71.3

61.0

61.8

0.865

70.7

60.7

61.7

0.108

Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Future Analyst: Ryan Richards Job #: 158820 Roadway: Van Buren Blvd West of Washington St. Road Segment: PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 33000 Peak Hour Traffic: 3300 Receiver Barrier Dist: 0 Centerline Dist. To Observer: Vehicle Speed: 100 55 Barrier Near Lane CL Dist: Centerline Separation: 0 40 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742

-90 Med. Truck

Heavy Truck

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

NOISE SOURCE ELEVATIONS (Feet)

90

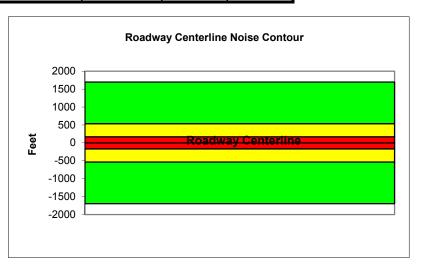
Rt View:

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	60.6	69.4	67.6	61.5	70.2	70.8	
Medium Trucks:	67.7	59.7	53.3	51.7	60.2	60.4	
Heavy Trucks:	71.7	59.7	50.7	51.9	61.2	61.3	
Vehicle Noise:	74.0	70.3	67.8	62.4	71.0	71.6	

Lft View:

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR								
Unmitigated								
60 dBA	1695							
65 dBA	536							
70 dBA	169							
Mitigated								
60 dBA								
65 dBA								
70 dBA								



0.848

0.865

0.049

0.027

0.103

0.108

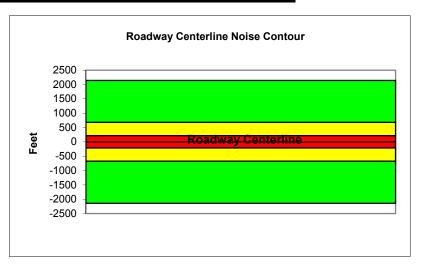
0.0184

	Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)									
Project Name:	ct Name: Riverside Housing Element Update Scenario: Future									
Analyst:	Ryan Richards			Job #:	158820					
Roadway:	Van Buren Blvd									
Road Segment:	West of Wood Rd.									
	PROJECT DATA			S	ITE DATA					
Centerline Dist to B	arrier	0	Road Grade:		0					
Barrier (0=wall, 1= b	perm):	0	Average Dail	y Traffic:	41700					
Receiver Barrier Dis	st:	0	Peak Hour Tr	affic:	4170					
Centerline Dist. To	Observer: 100	0	Vehicle Speed: 55							
Barrier Near Lane C	CL Dist:	0	Centerline Se	eparation:	40					
Barrier Far lane CL	Dist:	0		NO	ISE INPUT	S				
Pad Elevation:	0.9	5	Site condition	is HARD S	ITE					
Road Elevation:		0		F	LEET MIX					
Observer Height (al	oove grade):	0	Туре	Day	Evening	Night	Daily			
Barrier Height:		0	Auto	0.775	0.129	0.096	0.9742			
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184			
NOISE SO	OURCE ELEVATIONS	(Feet)	Heavy Truck	0.865	0.027	0.108	0.0074			
Autos:		0								
Medium Trucks:	2.3	3								
Heavy Trucks:	8	8								

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	61.6	70.4	68.6	62.5	71.2	71.8				
Medium Trucks:	68.7	60.7	54.3	52.7	61.2	61.4				
Heavy Trucks:	72.7	60.8	51.7	52.9	62.2	62.3				
Vehicle Noise:	75.0	71.3	68.9	63.4	72.1	72.6				

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	2143						
65 dBA	678						
70 dBA	214						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

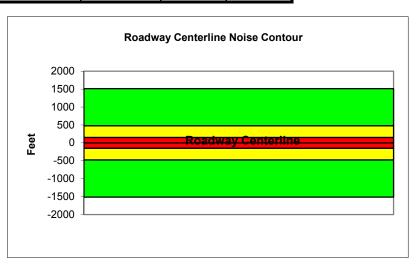


	Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)										
Project Name:	Riverside Ho	using Element U			Scenario:	Future					
Analyst:	Ryan Richard	ds			Job #:	158820					
Roadway:	Van Buren B	lvd									
Road Segment:	North of Arlin	gton Ave.									
	PROJECT D	ATA			S	ITE DATA					
Centerline Dist to E	Barrier	0		Road Grade:		0					
Barrier (0=wall, 1=	berm):	0		Average Dail	y Traffic:	48700					
Receiver Barrier Di	ist:	0		Peak Hour Tr	raffic:	4870					
Centerline Dist. To	Observer:	100		Vehicle Speed: 45							
Barrier Near Lane	CL Dist:	0		Centerline Se	eparation:	65					
Barrier Far lane CL	Dist:	0			NO	ISE INPUT	S				
Pad Elevation:		0.5		Site condition	is HARD S I	TE					
Road Elevation:		0			F	LEET MIX					
Observer Height (a	bove grade):	0		Туре	Day	Evening	Night	Daily			
Barrier Height:		0		Auto	0.775			0.9742			
Rt View: 90) L	.ft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184			
NOISE S	OURCE ELEV	ATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074			
Autos:		0									
Medium Trucks:		2.3									
Heavy Trucks:		8									

UNMITIG	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL					
Autos:	59.4	68.2	66.4	60.3	69.0	69.6					
Medium Trucks:	67.7	59.6	53.2	51.7	60.2	60.4					
Heavy Trucks:	72.2	60.3	51.2	52.4	62.0	62.1					
Vehicle Noise:	74.5	69.5	66.8	61.6	70.2	70.7					

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR								
Unmitigated								
60 dBA	1513							
65 dBA	478							
70 dBA	151							
Mitigated								
60 dBA								
65 dBA								
70 dBA								

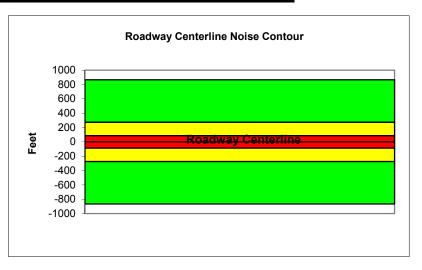


	Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)										
Project Name:	Riverside Housing E		, ,								
Analyst:	Ryan Richards	·		Job #:	158820						
Roadway:	Van Buren Blvd										
-	North of Colorado A	ve.									
	PROJECT DATA			S	ITE DATA						
Centerline Dist to Ba	arrier	0	Road Grade:		0						
Barrier (0=wall, 1= b	perm):	0	Average Dail	y Traffic:	37000						
Receiver Barrier Dis	st:	0	Peak Hour Ti	raffic:	3700						
Centerline Dist. To 0	Observer:	100	Vehicle Speed: 40								
Barrier Near Lane C	L Dist:	0	Centerline Se	eparation:	45						
Barrier Far lane CL	Dist:	0		NO	ISE INPUT	S					
Pad Elevation:		0.5	Site condition	ns HARD S I	TE						
Road Elevation:		0		F	LEET MIX						
Observer Height (ab	oove grade):	0	Туре	Day	Evening	Night	Daily				
Barrier Height:		0	Auto	0.775			0.9742				
Rt View: 90	Lft View	r: -90	Med. Truck	0.848	0.049	0.103	0.0184				
NOISE SC	URCE ELEVATION	IS (Feet)	Heavy Truck	0.865	0.027	0.108	0.0074				
Autos:		0									
Medium Trucks:		2.3									
Heavy Trucks:		8									

UNMITIG	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL					
Autos:	57.0	65.8	64.0	57.9	66.6	67.2					
Medium Trucks:	66.0	57.9	51.5	50.0	58.4	58.7					
Heavy Trucks:	70.8	58.9	49.8	51.1	60.8	60.9					
Vehicle Noise:	73.2	67.4	64.5	59.5	68.1	68.6					

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	866						
65 dBA	274						
70 dBA	87						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

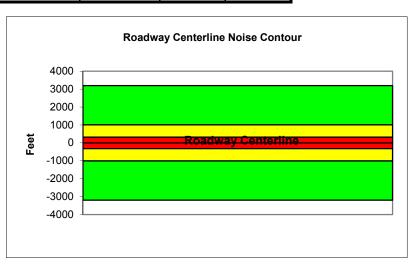


Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)										
Project Name:		iverside Housing Element Update Scenario: Future								
_	Ryan Richards	·		Job #:	158820					
	Van Buren Blvd									
Road Segment:	North of Colorado Ave.									
	PROJECT DATA			S	ITE DATA					
Centerline Dist to Ba	arrier 0		Road Grade:		0					
Barrier (0=wall, 1= b	perm): 0		Average Dail	y Traffic:	62100					
Receiver Barrier Dis	t: 0		Peak Hour Tr	raffic:	6210					
Centerline Dist. To 0	Observer: 100		Vehicle Spee	ed:	55					
Barrier Near Lane C	L Dist: 0		Centerline Se	eparation:	75					
Barrier Far lane CL	Dist: 0			NO	ISE INPUT	S				
Pad Elevation:	0.5		Site condition	ns HARD S I	TE					
Road Elevation:	0			F	LEET MIX					
Observer Height (ab	ove grade): 0		Туре	Day	Evening	Night	Daily			
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742			
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184			
NOISE SO	OURCE ELEVATIONS (F	eet)	Heavy Truck	0.865	0.027	0.108	0.0074			
Autos:	0									
Medium Trucks:	2.3									
Heavy Trucks:	8									

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	62.9	71.6	69.8	63.8	72.4	73.0				
Medium Trucks:	70.0	61.9	55.5	54.0	62.4	62.7				
Heavy Trucks:	73.9	62.0	52.9	54.2	63.4	63.6				
Vehicle Noise:	76.3	72.6	70.1	64.7	73.3	73.8				

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	3196						
65 dBA	1011						
70 dBA	320						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



Project Name: Riverside Housing Element Update Scenario: Future
Analyst: Ryan Richards Job #: 158820

Roadway: Victoria Ave.

Heavy Trucks:

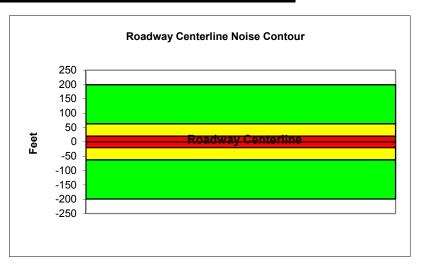
Road Segment: West of Van Buren Blvd.

PROJEC	T DATA			S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	8500		
Receiver Barrier Dist:	0		Peak Hour Tr	raffic:	850		
Centerline Dist. To Observer:	100		Vehicle Spee	ed:	40		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	55		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	ns HARD S I	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grad	e): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE E	LEVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	50.5	59.3	57.5	51.4	60.1	60.7				
Medium Trucks:	59.4	51.4	45.0	43.4	51.9	52.1				
Heavy Trucks:	64.3	52.4	43.3	44.5	54.2	54.4				
Vehicle Noise:	66.7	60.9	57.9	53.0	61.6	62.0				

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:										
Medium Trucks:										
Heavy Trucks:										
Vehicle Noise:										

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	199					
65 dBA	63					
70 dBA	20					
Mitigated						
60 dBA						
65 dBA						
70 dBA						



Job #:

158820

Project Name: Scenario: Future Plus Project Riverside Housing Element Update

Ryan Richards Analyst: Roadway: Alessandro Blvd

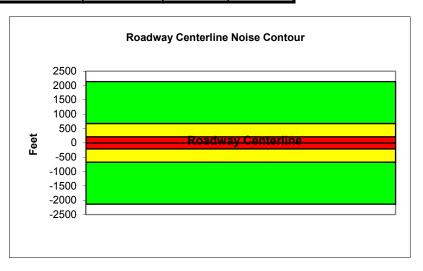
Road Segment: East of Mission Grove Pkwy

PROJEC	T DATA			S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	52900		
Receiver Barrier Dist:	0		Peak Hour Tr	raffic:	5290		
Centerline Dist. To Observer:	100		Vehicle Spee	ed:	50		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	65		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	is HARD S	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade	e): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE E	LEVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						
Heavy Trucks:	8						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)										
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	61.1	69.9	68.1	62.0	70.7	71.3				
Medium Trucks:	68.8	60.7	54.3	52.7	61.2	61.5				
Heavy Trucks:	73.0	61.1	52.0	53.2	62.6					
Vehicle Noise:	75.3	71.0	68.4	63.1	71.7	72.2				

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOIS	SE CONTOUR
Unmitigated	
60 dBA	2137
65 dBA	676
70 dBA	214
Mitigated	
60 dBA	
65 dBA	
70 dBA	

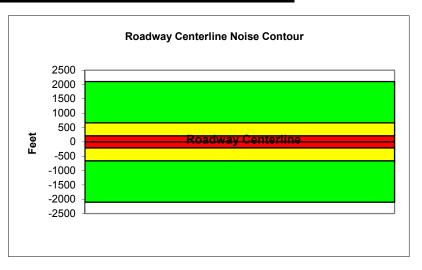


		Federal Highway Ad Traffic Noise Predict					
Project Name:	Riverside Hou	sing Element Update	-	Scenario:	Future Plu	s Project	
Analyst:	Ryan Richards	S		Job #:	158820		
Roadway:	Alessandro Bl	vd					
Road Segment:	North of Via V	ista					
	PROJECT DA	ATA		S	ITE DATA		
Centerline Dist to E	Barrier	0	Road Grade:		0		
Barrier (0=wall, 1=	berm):	0	Average Dail	y Traffic:	52100		
Receiver Barrier D	ist:	0	Peak Hour T	raffic:	5210		
Centerline Dist. To	Observer:	100	Vehicle Speed:		50		
Barrier Near Lane	CL Dist:	0	Centerline Se	eparation:	50		
Barrier Far lane CL	_ Dist:	0		NO	ISE INPUT	S	
Pad Elevation:		0.5	Site condition	ns HARD S	ITE		
Road Elevation:		0		F	LEET MIX		
Observer Height (a	bove grade):	0	Туре	Day	Evening	Night	Daily
Barrier Height:		0	Auto	0.775			0.9742
Rt View: 90) Lf	t View: -9	Med. Truck	0.848	0.049	0.103	0.0184
NOISE S	OURCE ELEVA	ATIONS (Feet)	Heavy Truck	0.865	0.027	0.108	0.0074
Autos:		0				-	
Medium Trucks:		2.3					
Heavy Trucks:		8					

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	61.2	70.0	68.2	62.1	70.8	71.4			
Medium Trucks:	68.9	60.8	54.5	52.9	61.4	61.6			
Heavy Trucks:	73.1	61.2	52.1	53.4	62.8	62.9			
Vehicle Noise:	75.5	71.1	68.5	63.2	71.8	72.4			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOIS	SE CONTOUR
Unmitigated	
60 dBA	2104
65 dBA	665
70 dBA	210
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Job #:

158820

FLEET MIX

Project Name: Riverside Housing Element Update Scenario: Future Plus Project

Analyst: Ryan Richards Roadway: Alessandro Blvd

Road Segment: West of Sycamore Canyon

PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 52800 Peak Hour Traffic: Receiver Barrier Dist: 0 5280 Centerline Dist. To Observer: Vehicle Speed: 100 55 Barrier Near Lane CL Dist: Centerline Separation: 0 60 Barrier Far lane CL Dist: 0 **NOISE INPUTS**

Pad Elevation: 0.5 Site conditions HARD SITE
Road Elevation: 0 FLEE
Observer Height (above grade): 0 Type Day Eve

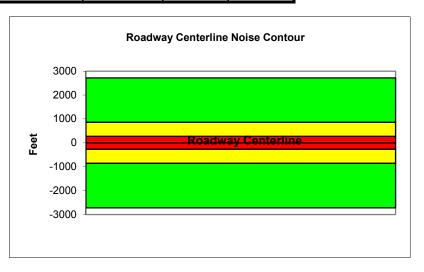
Evening Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 NOISE SOURCE ELEVATIONS (Feet) Heavy Truck 0.865 0.027 0.108 0.0074

Autos: 0
Medium Trucks: 2.3
Heavy Trucks: 8

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	62.3	71.1	69.3	63.3	71.9	72.5			
Medium Trucks:	69.5	61.4	55.0	53.4	61.9	62.2			
Heavy Trucks:	73.4	61.5	52.4	53.7	62.9				
Vehicle Noise:	75.7	72.1	69.6	64.2	72.8	73.3			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	2717				
65 dBA	859				
70 dBA	272				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO) Project Name: Riverside Housing Element Update Scenario: Future Plus Project Ryan Richards Analyst: Job #:

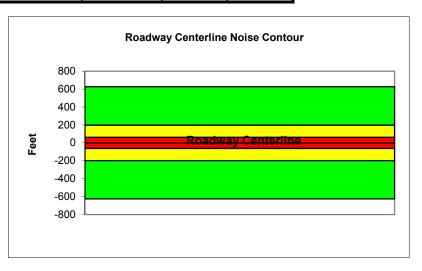
Arlington Avenue Roadway: Road Segment: East of Brockton Ave

PROJEC	T DATA			S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	26700		
Receiver Barrier Dist:	0		Peak Hour Tr	affic:	2670		
Centerline Dist. To Observer:	100		Vehicle Spee	ed:	40		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	32		
Barrier Far lane CL Dist:	0		NOISE INPUTS				
Pad Elevation:	0.5		Site condition	is HARD S I	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grad	e): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE ELEVATIONS (Feet)			Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						
Medium mucks.	2.0						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	55.8	64.6	62.8	56.7	65.4	66.0			
Medium Trucks:	64.8	56.7	50.3	48.7	57.2	57.5			
Heavy Trucks:	69.6	57.7	48.6	49.8	59.6	59.7			
Vehicle Noise:	72.0	66.2	63.3	58.3	66.9	67.4			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR				
Unmitigated				
60 dBA	626			
65 dBA	198			
70 dBA	63			
Mitigated				
60 dBA				
65 dBA				
70 dBA				



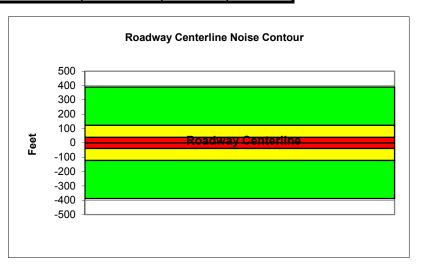
Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Future Plus Project Analyst: Ryan Richards Job #: 158820 California Ave. Roadway: Road Segment: East of Adams St. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 16600 Peak Hour Traffic: 1660 Receiver Barrier Dist: 0 Centerline Dist. To Observer: Vehicle Speed: 40 100 Barrier Near Lane CL Dist: Centerline Separation: 0 36 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 NOISE SOURCE ELEVATIONS (Feet) Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0 Medium Trucks: 2.3

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)						1)
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	53.7	62.5	60.7	54.6	63.2	63.9
Medium Trucks:	62.6	54.6	48.2	46.6	55.1	55.3
Heavy Trucks:	67.5	55.6	46.5	47.7	57.4	57.6
Vehicle Noise:	69.9	64.0	61.1	56.2	64.8	65.2

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR				
Unmitigated				
60 dBA	389			
65 dBA	123			
70 dBA	39			
Mitigated				
60 dBA				
65 dBA				
70 dBA				



Job #:

158820

Project Name: Riverside Housing Element Update Scenario: Future Plus Project

Analyst: Ryan Richards

Roadway: California Ave.

Heavy Trucks:

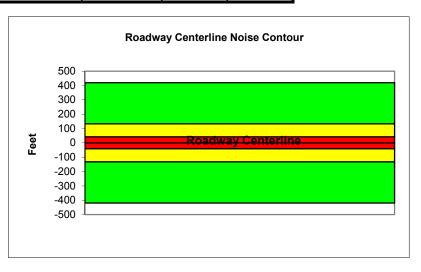
Road Segment: East of Van Buren Blvd.

PROJECT	DATA			S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	17900		
Receiver Barrier Dist:	0		Peak Hour Tr	affic:	1790		
Centerline Dist. To Observer:	100		Vehicle Spee	ed:	40		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	36		
Barrier Far lane CL Dist:	0		NOISE INPUTS				
Pad Elevation:	0.5		Site conditions HARD SITE				
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade):	. 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE ELE	VATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	54.0	62.8	61.0	54.9	63.6	64.2
Medium Trucks:	63.0	54.9	48.5	46.9	55.4	55.7
Heavy Trucks:	67.8	55.9	46.8	48.0	57.8	57.9
Vehicle Noise:	70.2	64.4	61.5	56.5	65.1	65.6

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	420				
65 dBA	133				
70 dBA	42				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Future Plus Project Ryan Richards Analyst: Job #: 158820 Roadway: Chicago Ave Road Segment: North of Spruce St. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 16300 Peak Hour Traffic: 1630 Receiver Barrier Dist: 0 Centerline Dist. To Observer: Vehicle Speed: 45 100 Barrier Near Lane CL Dist: Centerline Separation: 0 42 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 NOISE SOURCE ELEVATIONS (Feet) Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	55.0	63.8	62.0	55.9	64.5	65.2
Medium Trucks:	63.3	55.2	48.8	47.2	55.7	56.0
Heavy Trucks:	67.8	55.8	46.8	48.0	57.6	57.7
Vehicle Noise:	70.1	65.1	62.3	57.2	65.8	66.3

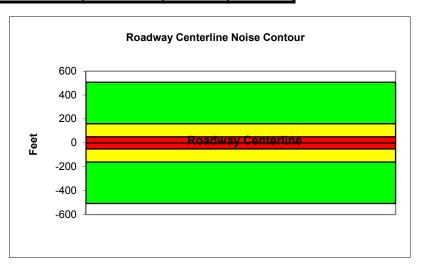
2.3

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	507				
65 dBA	160				
70 dBA	51				
Mitigated					
60 dBA					
65 dBA					
70 dBA					

Medium Trucks:



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Future Plus Project Job #:

Analyst: Ryan Richards

Indiana Ave.

Roadway: Road Segment: East of Harrison St.

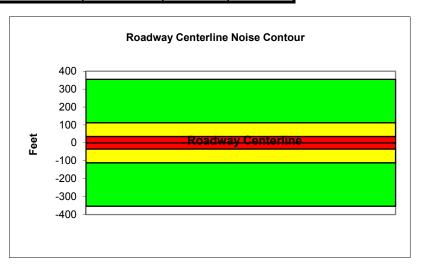
PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 15100 Peak Hour Traffic: Receiver Barrier Dist: 0 1510 Centerline Dist. To Observer: Vehicle Speed: 100 40 Barrier Near Lane CL Dist: Centerline Separation: 0 36 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 **NOISE SOURCE ELEVATIONS (Feet)** Heavy Truck 0.865 0.027 0.108 0.0074

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	53.3	62.1	60.3	54.2	62.8	63.4
Medium Trucks:	62.2	54.2	47.8	46.2	54.7	54.9
Heavy Trucks:	67.1	55.1	46.1	47.3	57.0	57.1
Vehicle Noise:	69.5	63.6	60.7	55.8	64.3	64.8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	354				
65 dBA	112				
70 dBA	35				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



Job #:

158820

Project Name: Riverside Housing Element Update Scenario: Future Plus Project

Analyst: Ryan Richards Roadway: Jackson St.

Road Segment: North of Indiana Ave.

PROJECT DATA		S	IIE DATA
Centerline Dist to Barrier	0	Road Grade:	0
Barrier (0=wall, 1= berm):	0	Average Daily Traffic:	12700
Receiver Barrier Dist:	0	Peak Hour Traffic:	1270
Centerline Dist. To Observer:	100	Vehicle Speed:	40
Barrier Near Lane CL Dist:	0	Centerline Separation:	42
Barrier Far lane CL Dist:	0	NOI	SE INPUTS
Pad Elevation:	0.5	Site conditions HARD SI	TE

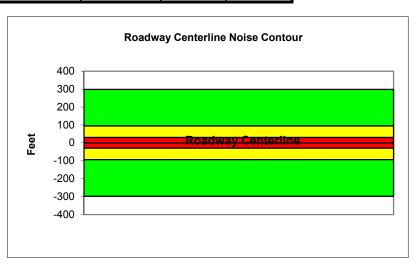
Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Evening Night Day Daily Type Barrier Height: 0.9742 Auto 0.775 0.129 0.096 -90 Med. Truck 0.0184 Rt View: 90 Lft View: 0.848 0.049 0.103 0.0074 NOISE SOURCE ELEVATIONS (Feet) Heavy Truck 0.865 0.027 0.108

Autos: 0
Medium Trucks: 2.3
Heavy Trucks: 8

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)						1)
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	52.4	61.2	59.4	53.3	62.0	62.6
Medium Trucks:	61.4	53.3	46.9	45.4	53.8	54.1
Heavy Trucks:	66.2	54.3	45.2	46.5	56.2	56.3
Vehicle Noise:	68.6	62.8	59.9	54.9	63.5	64.0

MITIGATED NOISE LEVELS (With topographic or barrier attenuation))
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	298				
65 dBA	94				
70 dBA	30				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



-90 Med. Truck

Heavy Truck

Job #:

158820

FLEET MIX

Evening

0.848

0.865

0.129

0.049

0.027

Night

0.096

0.103

0.108

Daily

0.9742

0.0184

0.0074

Project Name: Riverside Housing Element Update Scenario: Future Plus Project

Analyst: Ryan Richards Roadway: La Sierra Ave.

Road Segment: Magnolia Ave. to Collett Ave.

PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 26800 Peak Hour Traffic: 2680 Receiver Barrier Dist: 0 Centerline Dist. To Observer: Vehicle Speed: 40 100 Barrier Near Lane CL Dist: Centerline Separation: 0 50 Barrier Far lane CL Dist: **NOISE INPUTS**

Barrier Far lane CL Dist:

Pad Elevation:

Road Elevation:

Observer Height (above grade):

Barrier Height:

Observer He

Lft View:

NOISE SOURCE ELEVATIONS (Feet)
Autos:
0
Medium Trucks:
2.3
Heavy Trucks:
8

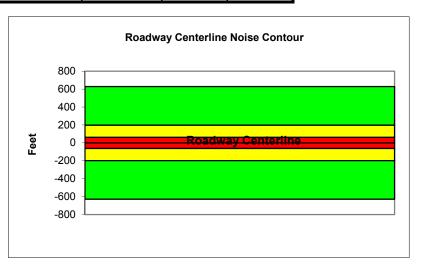
90

Rt View:

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)						1)
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	55.6	64.3	62.5	56.5	65.1	65.7
Medium Trucks:	64.5	56.4	50.1	48.5	57.0	57.2
Heavy Trucks:	69.4	57.4	48.4	49.6	59.3	59.4
Vehicle Noise:	71.7	65.9	63.0	58.0	66.6	67.1

MITIGAT	MITIGATED NOISE LEVELS (With topographic or barrier attenuation)					
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	628				
65 dBA	199				
70 dBA	63				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



Project Name: Riverside Housing Element Update Scenario: Future Plus Project

Analyst: Ryan Richards Job #: 158820

Roadway: La Sierra Ave.
Road Segment: North of Cypress Ave.

PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 20900 Peak Hour Traffic: 2090 Receiver Barrier Dist: 0 Centerline Dist. To Observer: Vehicle Speed: 45 100 Barrier Near Lane CL Dist: Centerline Separation: 0 50

Barrier Far lane CL Dist:

O

NOISE INPUTS

Pad Elevation:

O.5

Site conditions HARD SITE

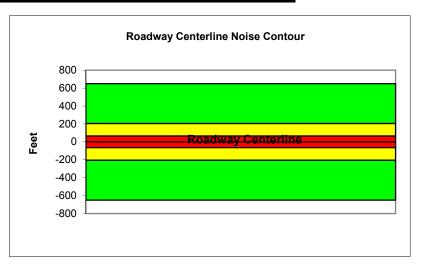
Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 NOISE SOURCE ELEVATIONS (Feet) Heavy Truck 0.865 0.027 0.108 0.0074

Autos: 0
Medium Trucks: 2.3
Heavy Trucks: 8

UNMITIG	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)					
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	55.9	64.7	62.9	56.9	65.5	66.1
Medium Trucks:	64.2	56.2	49.8	48.2	56.7	56.9
Heavy Trucks:	68.7	56.8	47.8	49.0	58.5	58.6
Vehicle Noise:	71.1	66.0	63.3	58.2	66.8	67.3

MITIGAT	MITIGATED NOISE LEVELS (With topographic or barrier attenuation)					
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	650				
65 dBA	206				
70 dBA	65				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



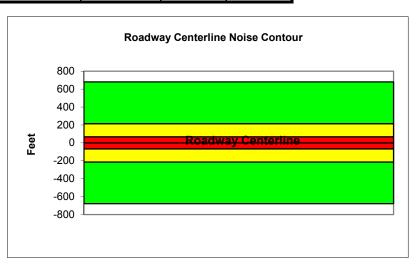
Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Future Plus Project Analyst: Ryan Richards Job #: 158820 Roadway: La Sierra Ave. Road Segment: North of Pierce St. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 29000 Peak Hour Traffic: 2900 Receiver Barrier Dist: 0 Centerline Dist. To Observer: Vehicle Speed: 40 100 Barrier Near Lane CL Dist: Centerline Separation: 0 50 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 NOISE SOURCE ELEVATIONS (Feet) Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0 Medium Trucks: 2.3

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)						1)
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	55.9	64.7	62.9	56.8	65.5	66.1
Medium Trucks:	64.9	56.8	50.4	48.8	57.3	57.5
Heavy Trucks:	69.7	57.8	48.7	49.9	59.6	59.8
Vehicle Noise:	72.1	66.3	63.3	58.4	67.0	67.4

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation))
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	679				
65 dBA	215				
70 dBA	68				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



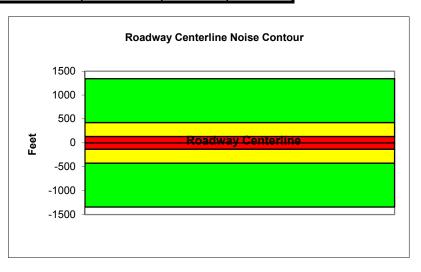
Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Future Plus Project Analyst: Ryan Richards Job #: 158820 Roadway: La Sierra Ave. North of SR-91 Road Segment: PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 43200 Peak Hour Traffic: Receiver Barrier Dist: 0 4320 Centerline Dist. To Observer: Vehicle Speed: 45 100 Barrier Near Lane CL Dist: Centerline Separation: 0 50 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 NOISE SOURCE ELEVATIONS (Feet) Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0 Medium Trucks: 2.3

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	59.1	67.9	66.1	60.0	68.7	69.3	
Medium Trucks:	67.4	59.3	52.9	51.4	59.8	60.1	
Heavy Trucks:	71.9	60.0	50.9	52.1	61.7	61.8	
Vehicle Noise:	74.2	69.2	66.5	61.3	69.9	70.4	

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOIS	SE CONTOUR
Unmitigated	
60 dBA	1343
65 dBA	425
70 dBA	134
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO) Project Name: Riverside Housing Element Update

Scenario: Future Plus Project

Analyst: Ryan Richards Job #: 158820 Roadway: Lincoln Ave

Road Segment: West of Monroe St.

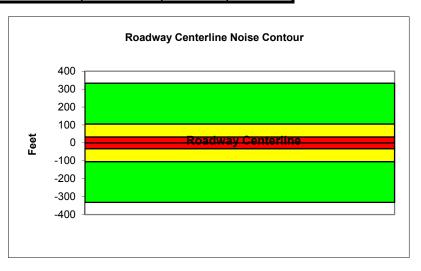
Heavy Trucks:

PROJECT	SITE DATA						
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	10700		
Receiver Barrier Dist:	0		Peak Hour Tr	affic:	1070		
Centerline Dist. To Observer:	100		Vehicle Spee	d:	45		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	36		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	is HARD S I	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade):	0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE ELE	VATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	53.3	62.0	60.2	54.2	62.8	63.4	
Medium Trucks:	61.5	53.5	47.1	45.5	54.0	54.2	
Heavy Trucks:	66.1	54.1	45.1	46.3	55.8	55.9	
Vehicle Noise:	68.4	63.3	60.6	55.5	64.1	64.6	

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:							
Medium Trucks:							
Heavy Trucks:							
Vehicle Noise:							

CENTERLINE NOIS	SE CONTOUR
Unmitigated	
60 dBA	332
65 dBA	105
70 dBA	33
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Future Plus Project Analyst: Ryan Richards Job #: 158820 Roadway: Magnolia Ave. East of Harrison St. Road Segment: PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 39000 Peak Hour Traffic: 3900 Receiver Barrier Dist: 0 Centerline Dist. To Observer: Vehicle Speed: 100 40 Barrier Near Lane CL Dist: Centerline Separation: 0 50 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 NOISE SOURCE ELEVATIONS (Feet) Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	57.2	66.0	64.2	58.1	66.7	67.4	
Medium Trucks:	66.1	58.1	51.7	50.1	58.6	58.8	
Heavy Trucks:	71.0	59.0	50.0	51.2	60.9	61.1	
Vehicle Noise:	73.4	67.5	64.6	59.7	68.3	68.7	

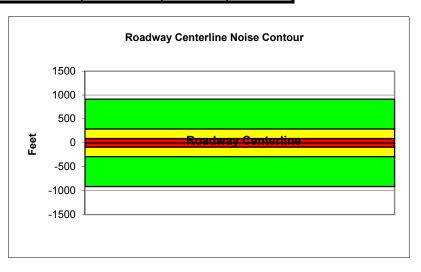
2.3

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	914					
65 dBA	289					
70 dBA	91					
Mitigated						
60 dBA						
65 dBA						
70 dBA						

Medium Trucks:



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Future Plus Project Analyst: Ryan Richards Job #: 158820 Roadway: Magnolia Ave. Road Segment: East of Jackson St. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 31200 Peak Hour Traffic: Receiver Barrier Dist: 0 3120 Centerline Dist. To Observer: Vehicle Speed: 100 40 Barrier Near Lane CL Dist: Centerline Separation: 0 50 Barrier Far lane CL Dist: **NOISE INPUTS** 0 Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Evening Day Night Daily Type Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 **NOISE SOURCE ELEVATIONS (Feet)** Heavy Truck 0.027 0.108 0.0074 0.865

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	56.2	65.0	63.2	57.1	65.8	66.4	
Medium Trucks:	65.2	57.1	50.7	49.1	57.6	57.9	
Heavy Trucks:	70.0	58.1	49.0	50.2	60.0	60.1	
Vehicle Noise:	72.4	66.6	63.7	58.7	67.3	67.8	

0

8

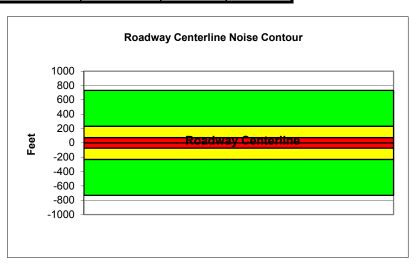
2.3

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:							
Medium Trucks:							
Heavy Trucks:							
Vehicle Noise:							

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	731						
65 dBA	231						
70 dBA	73						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

Autos:

Medium Trucks:



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Future Plus Project Ryan Richards Analyst: Job #:

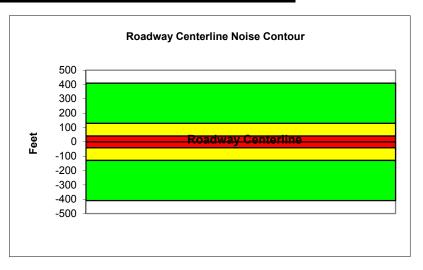
Roadway: Magnolia Ave. Road Segment: South of Jurupa Ave.

PROJECT DATA				S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	23700		
Receiver Barrier Dist:	0		Peak Hour Tr	raffic:	2370		
Centerline Dist. To Observer	: 100		Vehicle Spee	ed:	35		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	36		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	ns HARD S	ITE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grad	de): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE E	LEVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						
Heavy Trucks:	8						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	53.6	62.3	60.6	54.5	63.1	63.7			
Medium Trucks:	63.3	55.2	48.8	47.3	55.7	56.0			
Heavy Trucks:	68.5	56.6	47.5	48.7	58.6	58.8			
Vehicle Noise:	70.9	64.3	61.1	56.4	65.0	65.5			

MITIGAT	MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	409						
65 dBA	129						
70 dBA	41						
Mitigated							
60 dBA							
65 dBA							
70 dBA							



Project Name: Riverside Housing Element Update Scenario: Future Plus Project

Analyst: Ryan Richards Job #: 158820

Roadway: Magnolia Ave.

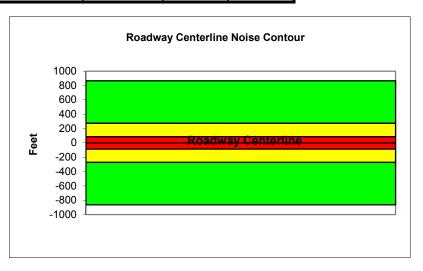
Road Segment: SR-91 WB Off-Ramp to SR-91 WB On-Ramp

PROJECT DATA				S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	36900		
Receiver Barrier Dist:	0		Peak Hour Tr	affic:	3690		
Centerline Dist. To Observer:	100		Vehicle Spee	d:	40		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	80		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	is HARD S I	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade):	0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90 Lft	View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE ELEVA	TIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						
Heavy Trucks:	8						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	56.5	65.3	63.5	57.5	66.1	66.7			
Medium Trucks:	65.5	57.4	51.1	49.5	58.0	58.2			
Heavy Trucks:	70.3	58.4	49.4	50.6	60.3	60.4			
Vehicle Noise:	72.7	66.9	64.0	59.0	67.6	68.1			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR							
Unmitigated							
60 dBA	864						
65 dBA	273						
70 dBA	86						
Mitigated							
60 dBA							
65 dBA							
70 dBA							

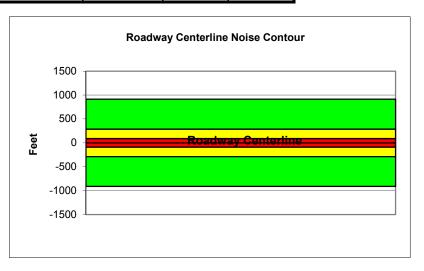


Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO)									
Project Name:	Riverside Housing E	lement Update	•	Scenario:	Future Plu	s Project			
Analyst:	Ryan Richards			Job #:	158820	-			
Roadway:	Magnolia Ave.								
Road Segment:	West of Tyler St.								
	PROJECT DATA			S	ITE DATA				
Centerline Dist to B	arrier	0	Road Grade:		0				
Barrier (0=wall, 1=	berm):	0	Average Dail	y Traffic:	38900				
Receiver Barrier Di	st:	0	Peak Hour T	raffic:	3890				
Centerline Dist. To	Observer: 1	00	Vehicle Spee	ed:	40				
Barrier Near Lane (CL Dist:	0	Centerline Se	eparation:	50				
Barrier Far lane CL	Dist:	0		NO	ISE INPUT	S			
Pad Elevation:	().5	Site condition	ns HARD S	TE				
Road Elevation:		0		F	LEET MIX				
Observer Height (a	bove grade):	0	Туре	Day	Evening	Night	Daily		
Barrier Height:		0	Auto	0.775	0.129	0.096	0.9742		
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184		
NOISE SO	OURCE ELEVATION	S (Feet)	Heavy Truck	0.865	0.027	0.108	0.0074		
Autos:		0							
Medium Trucks:	2	2.3							
Heavy Trucks:		8							

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	57.2	66.0	64.2	58.1	66.7	67.3			
Medium Trucks:	66.1	58.1	51.7	50.1	58.6	58.8			
Heavy Trucks:	71.0	59.0	50.0	51.2	60.9	61.0			
Vehicle Noise:	73.3	67.5	64.6	59.7	68.2	68.7			

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)									
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:									
Medium Trucks:									
Heavy Trucks:									
Vehicle Noise:									

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	912				
65 dBA	288				
70 dBA	91				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update

Scenario: Future Plus Project

Analyst: Ryan Richards Job #: 158820

Roadway: Martin Luther King Blvd.

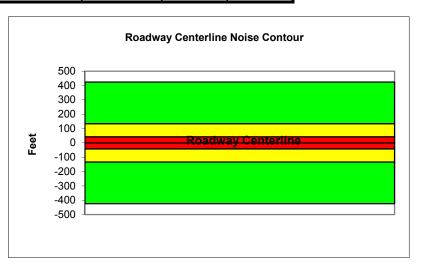
Road Segment: East of Iowa Ave.

PROJECT I		S	ITE DATA				
Centerline Dist to Barrier	0		Road Grade: 0				
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	24600		
Receiver Barrier Dist:	0		Peak Hour Tr	raffic:	2460		
Centerline Dist. To Observer:	100		Vehicle Spee	ed:	35		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	46		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	ns HARD S I	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade):	0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE ELEV	VATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						
Heavy Trucks:	8						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type Peak Leq Leq Day Leq Evening Leq Night Ldn				CNEL			
Autos:	53.6	62.4	60.6	54.5	63.1	63.7	
Medium Trucks:	63.3	55.2	48.8	47.3	55.8	56.0	
Heavy Trucks:	68.5	56.6	47.5	48.7	58.6	58.8	
Vehicle Noise:	70.9	64.3	61.1	56.4	65.0	65.5	

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type Peak Leq Leq Day Leq Evening Leq Night Ldn CN								
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	424				
65 dBA	134				
70 dBA	42				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Future Plus Project Analyst: Ryan Richards Job #: 158820 Martin Luther King Blvd. Roadway: Road Segment: East of Kansas Ave. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 24800 Peak Hour Traffic: 2480 Receiver Barrier Dist: 0 Centerline Dist. To Observer: Vehicle Speed: 100 35 Barrier Near Lane CL Dist: Centerline Separation: 0 46 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Night Daily Type

Auto

-90 Med. Truck

Heavy Truck

Autos: 0
Medium Trucks: 2.3
Heavy Trucks: 8

NOISE SOURCE ELEVATIONS (Feet)

90

Barrier Height:

Rt View:

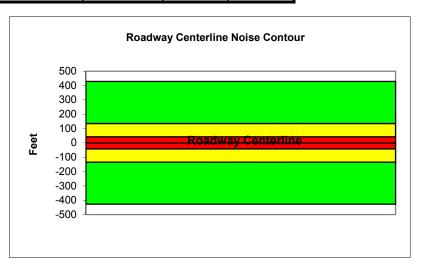
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	ehicle Type Peak Leq Leq Day Leq Evening Leq Night Ldn				CNEL		
Autos:	53.6	62.4	60.6	54.5	63.2	63.8	
Medium Trucks:	63.3	55.3	48.9	47.3	55.8	56.0	
Heavy Trucks:	68.5	56.6	47.5	48.8	58.7	58.8	
Vehicle Noise:	71.0	64.3	61.2	56.5	65.0	65.5	

0

Lft View:

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type Peak Leq Leq Day Leq Evening Leq Night Ldn CN								
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	428					
65 dBA	135					
70 dBA	43					
Mitigated						
60 dBA						
65 dBA						
70 dBA						



0.775

0.848

0.865

0.129

0.049

0.027

0.096

0.103

0.108

0.9742

0.0184

0.0074

Job #:

158820

Project Name: Riverside Housing Element Update Scenario: Future Plus Project

Analyst: Ryan Richards Roadway: Pierce St.

Road Segment: West of La Sierra Ave.

PROJECT DATA

Centerline Dist to Barrier

O

Road Grade:

O

Average Delik Treffice

20600

Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 20600 Peak Hour Traffic: 2060 Receiver Barrier Dist: 0 Centerline Dist. To Observer: Vehicle Speed: 40 100 Barrier Near Lane CL Dist: Centerline Separation: 0 45 **NOISE INPUTS**

Barrier Far lane CL Dist: 0 NOISE
Pad Elevation: 0.5 Site conditions HARD SITE

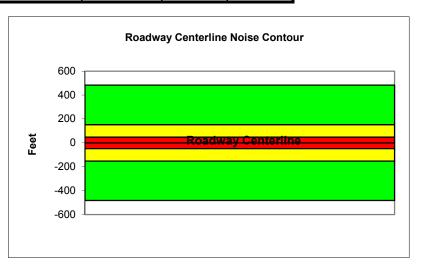
Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 NOISE SOURCE ELEVATIONS (Feet) Heavy Truck 0.865 0.027 0.108 0.0074

Autos: 0
Medium Trucks: 2.3
Heavy Trucks: 8

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type Peak Leq Leq Day Leq Evening Leq Night Ldn					CNEL		
Autos:	54.5	63.3	61.5	55.4	64.0	64.7	
Medium Trucks:	63.4	55.4	49.0	47.4	55.9	56.1	
Heavy Trucks:	68.3	56.3	47.3	48.5	58.2	58.4	
Vehicle Noise:	70.7	64.8	61.9	57.0	65.6	66.0	

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	483					
65 dBA	153					
70 dBA	48					
Mitigated						
60 dBA						
65 dBA						
70 dBA						



Job #:

158820

Project Name: Riverside Housing Element Update Scenario: Future Plus Project

Analyst: Ryan Richards

Roadway: Riverwalk Pkwy.

Heavy Trucks:

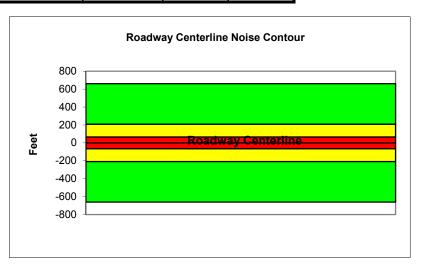
Road Segment: Sierra Vista Ave. to Raley Dr.

PROJECT		S	ITE DATA				
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	28200		
Receiver Barrier Dist:	0		Peak Hour Tr	affic:	2820		
Centerline Dist. To Observer:	100		Vehicle Spee	ed:	40		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	45		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	is HARD S I	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade):	. 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE ELE	VATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)						1)
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	55.9	64.6	62.8	56.8	65.4	66.0
Medium Trucks:	64.8	56.7	50.4	48.8	57.3	57.5
Heavy Trucks:	69.6	57.7	48.7	49.9	59.6	59.7
Vehicle Noise:	72.0	66.2	63.3	58.3	66.9	67.4

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	660				
65 dBA	209				
70 dBA	66				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



Туре

Auto

-90 Med. Truck

Heavy Truck

Job #:

Day

0.775

0.848

0.865

158820

FLEET MIX

Evening

0.129

0.049

0.027

Night

0.096

0.103

0.108

Daily

0.9742

0.0184

0.0074

Project Name: Riverside Housing Element Update Scenario: Future Plus Project

Analyst: Ryan Richards Roadway: Trautwein Rd.

Road Segment: South of Alessandro Blvd.

PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 32700 Peak Hour Traffic: Receiver Barrier Dist: 0 3270 Centerline Dist. To Observer: Vehicle Speed: 100 50 Barrier Near Lane CL Dist: Centerline Separation: 0 60 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5

Road Elevation: 0
Observer Height (above grade): 0
Barrier Height: 0

Lft View:

NOISE SOURCE ELEVATIONS (Feet)
Autos:

Medium Trucks:
Heavy Trucks:

8

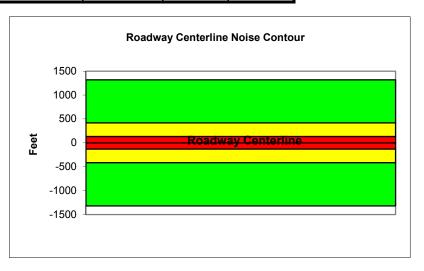
90

Rt View:

UNMITIGA	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)					
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	59.1	67.8	66.1	60.0	68.6	69.2
Medium Trucks:	66.7	58.7	52.3	50.7	59.2	59.4
Heavy Trucks:	71.0	59.0	50.0	51.2	60.6	
Vehicle Noise:	73.3	68.9	66.4	61.1	69.7	70.2

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	1319				
65 dBA	417				
70 dBA	132				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



Туре

Auto

-90 Med. Truck

Heavy Truck

Job #:

Site conditions HARD SITE

Day

0.775

0.848

0.865

158820

NOISE INPUTS

FLEET MIX

Evening

0.129

0.049

0.027

Night

0.096

0.103

0.108

Daily

0.9742

0.0184

0.0074

Project Name: Riverside Housing Element Update Scenario: Future Plus Project

Analyst: Ryan Richards Roadway: Tyler St.

Road Segment: North of Magnolia Ave.

PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 28700 Peak Hour Traffic: Receiver Barrier Dist: 0 2870 Centerline Dist. To Observer: Vehicle Speed: 100 40 Barrier Near Lane CL Dist: Centerline Separation: 0 60

Barrier Far lane CL Dist:

Pad Elevation:

Road Elevation:

0

0

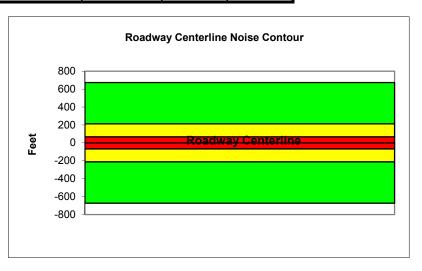
Observer Height (above grade): 0
Barrier Height: 0
Rt View: 90 Lft View:

NOISE SOURCE ELEVATIONS (Feet)
Autos:
0
Medium Trucks:
2.3
Heavy Trucks:
8

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)					1)	
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	55.7	64.5	62.7	56.6	65.3	65.9
Medium Trucks:	64.7	56.6	50.2	48.6	57.1	57.4
Heavy Trucks:	69.5	57.6	48.5	49.7	59.5	59.6
Vehicle Noise:	71.9	66.1	63.2	58.2	66.8	67.3

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	673				
65 dBA	213				
70 dBA	67				
Mitigated					
60 dBA					
65 dBA					
70 dBA					



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Future Plus Project Analyst: Ryan Richards Job #: 158820 Tyler St. Roadway: Road Segment: North of SR-91 PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 46500 Peak Hour Traffic: Receiver Barrier Dist: 0 4650 Centerline Dist. To Observer: Vehicle Speed: 100 35 Barrier Near Lane CL Dist: Centerline Separation: 0 60 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 **NOISE SOURCE ELEVATIONS (Feet)** Heavy Truck 0.865 0.027 0.108 0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)						1)
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	56.1	64.9	63.1	57.0	65.7	66.3
Medium Trucks:	65.9	57.8	51.4	49.8	58.3	58.6
Heavy Trucks:	71.1	59.1	50.1	51.3	61.2	61.3
Vehicle Noise:	73.5	66.9	63.7	59.0	67.6	68.0

0

8

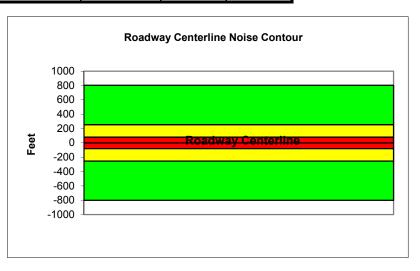
2.3

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)						
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR					
Unmitigated					
60 dBA	802				
65 dBA	254				
70 dBA	80				
Mitigated					
60 dBA					
65 dBA					
70 dBA					

Autos:

Medium Trucks:

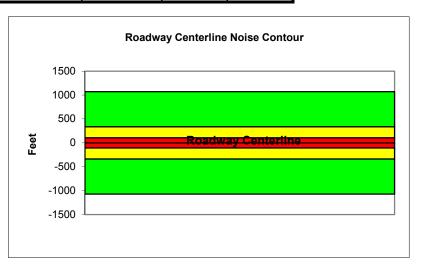


		Federal Highway Traffic Noise Pr						
Project Name:	Riverside Hous	sing Element Upd	ate	·	Scenario:	Future Plu	s Project	
Analyst:	Ryan Richards				Job #:	158820	-	
Roadway:	Van Buren Blv	b						
Road Segment:	North of SR-91							
	PROJECT DA	TA			S	ITE DATA		
Centerline Dist to E	Barrier	0		Road Grade:		0		
Barrier (0=wall, 1=	berm):	0		Average Dail	y Traffic:	45700		
Receiver Barrier Di	ist:	0		Peak Hour Ti	raffic:	4570		
Centerline Dist. To	Observer:	100		Vehicle Spee	ed:	40		
Barrier Near Lane	CL Dist:	0		Centerline Se	eparation:	60		
Barrier Far lane CL	. Dist:	0			NO	ISE INPUT	S	
Pad Elevation:		0.5		Site condition	ns HARD S	TE		
Road Elevation:		0			F	LEET MIX		
Observer Height (a	bove grade):	0		Туре	Day	Evening	Night	Daily
Barrier Height:		0		Auto	0.775			0.9742
Rt View: 90) Lft	View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE S	OURCE ELEVA	TIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:		0						
Medium Trucks:		2.3						
Heavy Trucks:		8						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	57.7	66.5	64.7	58.6	67.3	67.9		
Medium Trucks:	66.7	58.6	52.2	50.7	59.2	59.4		
Heavy Trucks:	71.5	59.6	50.5	51.8	61.5	61.6		
Vehicle Noise:	73.9	68.1	65.2	60.2	68.8	69.3		

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:							
Medium Trucks:							
Heavy Trucks:							
Vehicle Noise:							

CENTERLINE NOIS	SE CONTOUR
Unmitigated	
60 dBA	1072
65 dBA	339
70 dBA	107
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Project Name: Riverside Housing Element Update Scenario: Future Plus Project

Analyst: Ryan Richards Job #: 158820

Roadway: Van Buren Blvd

Heavy Trucks:

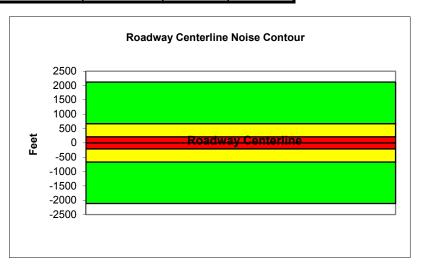
Road Segment: South of Cleveland Ave.

PROJECT DATA				S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	41200		
Receiver Barrier Dist:	0		Peak Hour Tr	raffic:	4120		
Centerline Dist. To Observe	r: 100		Vehicle Spee	ed:	55		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	45		
Barrier Far lane CL Dist:	0		NOISE INPUTS				
Pad Elevation:	0.5		Site condition	is HARD S i	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above gra	de): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE	ELEVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						

UNMITIGA	UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	61.5	70.3	68.5	62.4	71.0	71.6		
Medium Trucks:	68.6	60.5	54.2	52.6	61.1	61.3		
Heavy Trucks:	72.6	60.6	51.6	52.8	62.1	62.2		
Vehicle Noise:	74.9	71.2	68.7	63.3	71.9	72.5		

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:							
Medium Trucks:							
Heavy Trucks:							
Vehicle Noise:							

CENTERLINE NOIS	SE CONTOUR
Unmitigated	
60 dBA	2117
65 dBA	669
70 dBA	212
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Project Name: Riverside Housing Element Update Scenario: Future Plus Project

Ryan Richards Analyst: Job #: 158820

Roadway: Van Buren Blvd Road Segment:

Heavy Trucks:

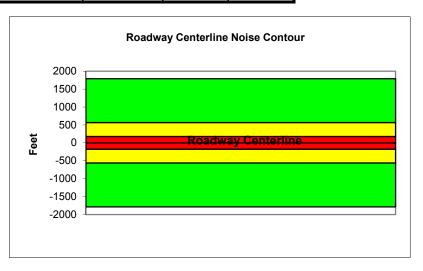
West of Washington St.

	PROJECT	DATA			S	ITE DATA		
Centerline Dist	to Barrier	0		Road Grade:		0		
Barrier (0=wall,	1= berm):	0		Average Dail	y Traffic:	34800		
Receiver Barrie	r Dist:	0		Peak Hour Tr	affic:	3480		
Centerline Dist.	To Observer:	100		Vehicle Spee	ed:	55		
Barrier Near La	ne CL Dist:	0		Centerline Se	eparation:	40		
Barrier Far lane	: CL Dist:	0		NOISE INPUTS				
Pad Elevation:		0.5		Site condition	is HARD S	TE		
Road Elevation	:	0			F	LEET MIX		
Observer Heigh	nt (above grade):	0		Туре	Day	Evening	Night	Daily
Barrier Height:		0		Auto	0.775	0.129	0.096	0.9742
Rt View:	90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOIS	E SOURCE ELE	VATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:		0					•	-
Medium Trucks	:	2.3						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	60.8	69.6	67.8	61.7	70.4	71.0		
Medium Trucks:	68.0	59.9	53.5	51.9	60.4	60.6		
Heavy Trucks:	71.9	60.0	50.9	52.1	61.4	61.5		
Vehicle Noise:	74.2	70.5	68.1	62.7	71.3	71.8		

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:							
Medium Trucks:							
Heavy Trucks:							
Vehicle Noise:							

CENTERLINE NOIS	SE CONTOUR
Unmitigated	
60 dBA	1787
65 dBA	565
70 dBA	179
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Future Plus Project Analyst: Ryan Richards Job #: 158820 Van Buren Blvd Roadway: Road Segment: West of Wood Rd. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 43600 Peak Hour Traffic: 4360 Receiver Barrier Dist: 0 Centerline Dist. To Observer: Vehicle Speed: 100 55 Barrier Near Lane CL Dist: Centerline Separation: 0 40 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Night Daily Type Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 **NOISE SOURCE ELEVATIONS (Feet)** Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)								
Vehicle Type	Peak Leq Leq Day Leq Evening Leq Night Ldn							
Autos:	61.8	70.6	68.8	62.7	71.4	72.0		
Medium Trucks:	68.9	60.9	54.5	52.9	61.4	61.6		
Heavy Trucks:	72.9	61.0	51.9	53.1	62.4	62.5		
Vehicle Noise:	75.2	71.5	69.1	63.6	72.2	72.8		

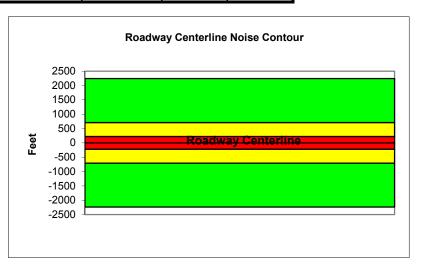
2.3

8

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)							
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:							
Medium Trucks:							
Heavy Trucks:							
Vehicle Noise:							

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	2239					
65 dBA	708					
70 dBA	224					
Mitigated						
60 dBA						
65 dBA						
70 dBA						

Medium Trucks:



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Future Plus Project Analyst: Ryan Richards Job #: 158820 Roadway: Van Buren Blvd Road Segment: North of Arlington Ave. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 52500 Peak Hour Traffic: Receiver Barrier Dist: 0 5250 Centerline Dist. To Observer: Vehicle Speed: 100 45 Barrier Near Lane CL Dist: Centerline Separation: 0 65 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5

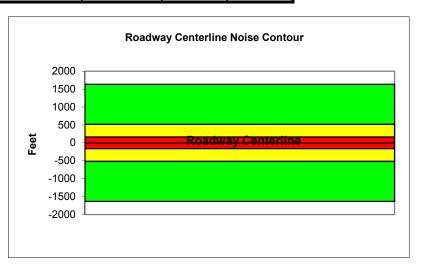
Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily Barrier Height: 0 Auto 0.775 0.129 0.096 0.9742 Rt View: 90 Lft View: -90 Med. Truck 0.848 0.049 0.103 0.0184 **NOISE SOURCE ELEVATIONS (Feet)** Heavy Truck 0.865 0.027 0.108 0.0074 Autos: 0

Autos: 0
Medium Trucks: 2.3
Heavy Trucks: 8

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	59.7	68.5	66.7	60.7	69.3	69.9		
Medium Trucks:	68.0	60.0	53.6	52.0	60.5	60.7		
Heavy Trucks:	72.5	60.6	51.5	52.8	62.3	62.4		
Vehicle Noise:	74.9	69.8	67.1	62.0	70.5	71.0		

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type	Type Peak Leq Leq Day Leq Evening Leq Night Ldn CNi							
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	1632					
65 dBA	516					
70 dBA	163					
Mitigated						
60 dBA						
65 dBA						
70 dBA						



Federal Highway Administration RD-77-108 **Traffic Noise Prediction Model (CALVENO)** Project Name: Riverside Housing Element Update Scenario: Future Plus Project Analyst: Ryan Richards Job #: 158820 Roadway: Van Buren Blvd Road Segment: North of Colorado Ave. PROJECT DATA SITE DATA Centerline Dist to Barrier 0 Road Grade: Barrier (0=wall, 1= berm): 0 Average Daily Traffic: 41700 Peak Hour Traffic: Receiver Barrier Dist: 0 4170 Centerline Dist. To Observer: Vehicle Speed: 100 40 Barrier Near Lane CL Dist: Centerline Separation: 0 45 Barrier Far lane CL Dist: 0 **NOISE INPUTS** Site conditions HARD SITE Pad Elevation: 0.5 Road Elevation: 0 **FLEET MIX** Observer Height (above grade): 0 Day Evening Туре Night Daily

Auto

-90 Med. Truck

Heavy Truck

Autos: 0
Medium Trucks: 2.3
Heavy Trucks: 8

NOISE SOURCE ELEVATIONS (Feet)

90

Barrier Height:

Rt View:

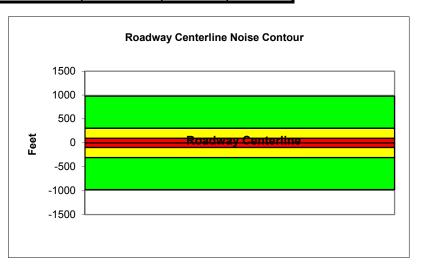
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	57.5	66.3	64.5	58.5	67.1	67.7		
Medium Trucks:	66.5	58.4	52.1	50.5	59.0	59.2		
Heavy Trucks:	71.3	59.4	50.4	51.6	61.3	61.4		
Vehicle Noise:	73.7	67.9	65.0	60.0	68.6	69.1		

0

Lft View:

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type Peak Leq Leq Day Leq Evening Leq Night Ldn C								
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR						
Unmitigated						
60 dBA	977					
65 dBA	309					
70 dBA	98					
Mitigated						
60 dBA						
65 dBA						
70 dBA						



0.775

0.848

0.865

0.129

0.049

0.027

0.096

0.103

0.108

0.9742

0.0184

0.0074

Federal Highway Administration RD-77-108 Traffic Noise Prediction Model (CALVENO) Project Name: Riverside Housing Element Update Scenario: Future Plus Project Analyst: Ryan Richards Job #: 158820

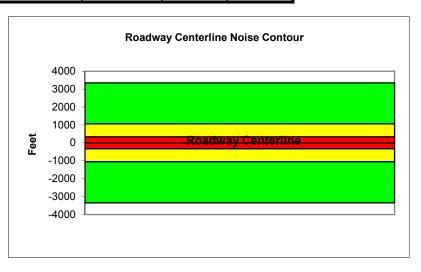
Roadway: Van Buren Blvd Road Segment: North of Colorado Ave.

PROJEC	T DATA			S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Dail	y Traffic:	65100		
Receiver Barrier Dist:	0		Peak Hour Tr	raffic:	6510		
Centerline Dist. To Observer:	100		Vehicle Spee	ed:	55		
Barrier Near Lane CL Dist:	0		Centerline Se	eparation:	75		
Barrier Far lane CL Dist:	0			NO	ISE INPUT	S	
Pad Elevation:	0.5		Site condition	is HARD S	TE		
Road Elevation:	0			F	LEET MIX		
Observer Height (above grade	e): 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE EI	LEVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0						
Medium Trucks:	2.3						
Heavy Trucks:	8						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)								
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL		
Autos:	63.1	71.8	70.1	64.0	72.6	73.2		
Medium Trucks:	70.2	62.1	55.7	54.2	62.7	62.9		
Heavy Trucks:	74.1	62.2	53.2	54.4	63.6	63.8		
Vehicle Noise:	76.5	72.8	70.3	64.9	73.5	74.0		

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)								
Vehicle Type Peak Leq Leq Day Leq Evening Leq Night Ldn C								
Autos:								
Medium Trucks:								
Heavy Trucks:								
Vehicle Noise:								

CENTERLINE NOISE CONTOUR				
Unmitigated				
60 dBA	3346			
65 dBA	1058			
70 dBA	335			
Mitigated				
60 dBA				
65 dBA				
70 dBA				



Job #:

158820

Project Name: Riverside Housing Element Update Scenario: Future Plus Project

Analyst: Ryan Richards Roadway: Victoria Ave.

Road Segment: West of Van Buren Blvd.

<u> </u>							
PROJECT	DATA			S	ITE DATA		
Centerline Dist to Barrier	0		Road Grade:		0		
Barrier (0=wall, 1= berm):	0		Average Daily Traffic:		10600		
Receiver Barrier Dist:	0		Peak Hour Traffic:		1060		
Centerline Dist. To Observer:	100		Vehicle Spee	ed:	40		
Barrier Near Lane CL Dist: 0			Centerline Se	eparation:	55		
Barrier Far lane CL Dist:	0		NOISE INPUTS				
Pad Elevation:	0.5		Site conditions HARD SITE				
Road Elevation:	0		FLEET MIX				
Observer Height (above grade)	: 0		Туре	Day	Evening	Night	Daily
Barrier Height:	0		Auto	0.775	0.129	0.096	0.9742
Rt View: 90	Lft View:	-90	Med. Truck	0.848	0.049	0.103	0.0184
NOISE SOURCE ELI	EVATIONS (Feet)		Heavy Truck	0.865	0.027	0.108	0.0074
Autos:	0				•		
Medium Trucks:	2.3						
Heavy Trucks:	8						

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)						1)
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	51.5	60.2	58.4	52.4	61.0	61.6
Medium Trucks:	60.4	52.3	46.0	44.4	52.9	53.1
Heavy Trucks:	65.3	53.3	44.3	45.5	55.2	55.3
Vehicle Noise:	67.6	61.8	58.9	53.9	62.5	63.0

MITIGATED NOISE LEVELS (With topographic or barrier attenuation))
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR				
Unmitigated				
60 dBA	248			
65 dBA	79			
70 dBA	25			
Mitigated				
60 dBA				
65 dBA				
70 dBA				

